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Philoſophical Letters:

OR,

MODEST

REFLECTIONS

Upon ſome Opinions in

NATURAL PHILOSOPHY,

MAINTAINED

By ſeveral Famous and Learned Authors of this Age,

Expreſſed by way of LETTERS:

97388

By the Thrice Noble, Illuſtrious, and Excellent Princeſs,

The Lady MARCHIONESS of *NEWCASTLE.*

LONDON, Printed in the Year, 1664.

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Tho.s Beckwith. of York Painter & F.A.S.

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TO

HER EXCELLENCY

The Lady MARCHIONESS

OF

NEWCASTLE,

On her Book of

Philoſophical Letters.

'Tis Supernatural, nay 'tis Divine,
To write whole Volumes ere I can a line.
I 'mplor'd the Lady Muſes, thoſe fine things,
But they have broken all their Fidle-ſtrings
And cannot help me; Nay, then I did try
Their Helicon, *but that is grown all dry:*

Then

Then on Parnaſſus *I did make a ſallie,*
But that's laid level, like a Bowling-alley,
Invok'd my Muſe, found it a Pond, a Dream,
To your eternal Spring, and running Stream;
So clear and freſh, with Wit and Phanſie ſtore,
As then deſpair did bid me write no more.

W. Newcaſtle.

To

TO

HIS EXCELLENCY

The LORD MARQUIS of

NEWCASTLE.

My Noble Lord,

ALthough you have always encouraged me in my harmleſs paſtime of Writing, yet was I afraid that your Lordſhip would be angry with me for Writing and Publiſhing this Book, by reaſon it is a Book of *Controverſies*, of which I have heard your Lordſhip ſay, That Controverſies and Diſputations make Enemies of Friends, and that ſuch Diſputations and Controverſies as theſe, are a pedantical kind of quarrelling, not becoming Noble Perſons. But your Lordſhip will be pleaſed to conſider in my behalf, that it is impoſsible for one Perſon to be of every one's Opinion, if their opinions be different, and that my Opinions in Philoſophy, being new, and never thought of, at leaſt not divulged by any, but my ſelf, are quite different from others: For the Ground of my Opinions is, that there is not onely a Senſitive, but alſo a Rational Life and Knowledge, and ſo a double Perception in all Creatures: And thus my opinions being new, are not ſo eaſily underſtood as thoſe, that take vp ſeveral pieces of old opini-

ons, of which they patch up a new Philoſophy, (if new may be made of old things,) like a Suit made up of old Stuff bought at the Brokers: Wherefore to find out a Truth, at leaſt a Probability in Natural Philoſophy by a new and different way from other Writers, and to make this way more known, eaſie and intelligible, I was in a manner forced to write this Book; for I have not contradicted thoſe Authors in any thing, but what concerns and is oppoſite to my opinions; neither do I any thing, but what they have done themſelves, as being common amongſt them to contradict each other: which may as well be allowable, as for Lawyers to plead at the Barr in oppoſite Cauſes. For as Lawyers are not Enemies to each other, but great Friends, all agreeing from the Barr, although not at the Barr: ſo it is with Philoſophers, who make their Opinions as their Clients, not for Wealth, but for Fame, and therefore have no reaſon to become Enemies to each other, by being Induſtrious in their Profeſsion. All which conſidered, was the cauſe of Publiſhing this Book; wherein although I diſſent from their opinions, yet doth not this take off the leaſt of the reſpect and eſteem I have of their Merits and Works. But if your Lordſhip do but pardon me, I care not if I be condemned by others; for your Favour is more then the World to me, for which all the actions of my Life ſhall be devoted and ready to ſerve you, as becomes,

My Lord,

Your Lordſhips

honeſt Wife, and humble Servant

M. N.

TO THE

MOST FAMOUS

UNIVERSITY

OF

CAMBRIDGE.

Most Noble, Ingenious, Learned, and Industrious Students.

BE not offended, that I dedicate to you this weak and infirm work of mine; for though it be not an offering worthy your acceptance, yet it is as much as I can present for this time; and I wish from my Soul, I might be so happy as to have some means or ways to express my Gratitude for your Magnificent favours to me, having done me more honour then ever I could expect, or give sufficient thanks for: But your Generosity is above all Gratitude, and your Favours above all Merit, like as your Learning is above Contradiction: And I pray God your University may flourish to the end of the World, for the Service of the Church, the Truth of Religion, the Salvation of Souls, the Instruction of Youth, the preservation of Health,

and

and prolonging of Life, and for the increaſe of profitable Arts and Sciences: ſo as your ſeveral ſtudies may be, like ſeveral Magiſtrates, united for the good and benefit of the whole Common-wealth, nay, the whole World. May Heaven proſper you, the World magnifie you, and Eternity record your fame: Which are the hearty wiſhes and prayers of,

Your moſt obliged Servant

M. NEWCASTLE.

A PREFACE TO THE READER.

Worthy Readers,

I Did *not write this Book out of* delight, love or humour to contradiction; for I would rather praiſe, then contradict any Perſon or Perſons that are ingenious; but by reaſon Opinion is free, and may paſs without a paſs-port, I took the liberty to declare my own opinions as other Philoſophers do, and to that purpoſe I have here ſet down ſeveral famous and learned Authors opinions, and my anſwers to them in the form of Letters, which was the eaſieſt way for me to write; and by ſo doing, I have done that, which I would have bone unto me; for I am as willing to have my opinions contradicted, as I do contradict others: for I love Reaſon ſo well, that whoſoever can bring moſt rational and probable arguments, ſhall have my vote, although

againſt my own opinion. But you may ſay, If contradictions were frequent, there would be no agreement amongſt Mankind. I anſwer; It is very true: Wherefore Contradictions are better in general Books, then in particular Families, and in Schools better then in Publick States, and better in Philoſophy then in Divinity. All which conſidered, I ſhun, as much as I can, not to diſcourſe or write of either Church or State. But I deſire ſo much favour, or rather Juſtice of you, *Worthy Readers*, as not to interpret my objections or anſwers any other ways then againſt ſeveral opinions in Philoſophy; for I am confident there is not any body, that doth eſteem, reſpect, and honour learned and ingenious Perſons more then I do: Wherefore judg me neither to be of a contradicting humor, nor of a vain-glorious mind for diſſenting from other mens opinions, but rather that it is done out of love to Truth, and to make my own opinions the more intelligible, which cannot better be done then by arguing and comparing other mens opinions with them. The Authors whoſe opinions I mention, I have read, as I found them printed, in my native Language, except *Des Cartes*, who being in Latine, I had ſome few places tranſlated to me out of his works; and I muſt confeſs, that ſince I have read the works of theſe learned men, I underſtand the names and terms of Art a little better then I did before; but it is not ſo much as to make me a Scholar, nor yet ſo little, but that, had I read more before I did begin to write my other Book called *Philoſophical Opinions*, they would have been more intelligible; for my error was, I began to write ſo early, that I had not liv'd

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ſo long as to be able to read many Authors; I cannot ſay, I divulged my opinions as ſoon as I had conceiv'd them, but yet I divulged them too ſoon to have them artificial and methodical, But ſince what is paſt, cannot be recalled, I muſt deſire you to excuſe thoſe faults, which were committed for want of experience and learning. As for School-learning, had I applied my ſelf to it, yet I am confident I ſhould never have arrived to any; for I am ſo uncapable of Learning, that I could never attain to the knowledge of any other Language but my native, eſpecially by the Rules of Art: wherefore I do not repent that I ſpent not my time in Learning, for I conſider, it is better to write wittily then learnedly; nevertheleſs, I love and eſteem Learning, although I am not capable of it. But you may ſay, I have expreſſed neither Wit nor Learning in my Writings: Truly, if not, I am the more ſorry for it; but ſelf-*conceit, which is natural to mankind,* eſpecially to our Sex, did flatter and ſecretly perſwade me that my Writings had Senſe and Reaſon, Wit and Variety; but Judgment being not called to Counſel, I yielded to Self-conceits flattery, and ſo put out my Writings to be Printed as faſt as I could, without being reviewed or corrected: Neither did I fear any cenſure; for Self-conceit had perſwaded me, I ſhould be highly applauded; wherefore I made ſuch haſte, that I had three or four Books printed preſently after each other.

But to return to this preſent Work, I muſt deſire you, *worthy Readers,* to read firſt my Book called *Philoſophical and Phyſical Opinions*, before you cenſure this, for this Book is but an explanation of the former, wherein is contained the Ground of my Opinions, and thoſe

that

that will judge well of a Building, muſt firſt conſider the Foundation; to which purpoſe I will repeat ſome few Heads and Principles of my Opinions, which are theſe following: Firſt, That Nature is Infinite, and the Eternal Servant of God: Next, That ſhe is Corporeal, and partly ſelf-moving, dividable and compoſable; that all and every particular Creature, as alſo all perception and variety in Nature, is made by corporeal ſelf-motion, which I name ſenſitive and rational matter, which is life and knowledg, ſenſe and reaſon. Again, That theſe ſenſitive and rational parts of matter are the pureſt and ſubtileſt parts of Nature, as the active parts, the knowing, underſtanding and prudent parts, the deſigning, architectonical and working parts, nay, the Life and Soul of Nature, and that there is not any Creature or part of nature without this Life and Soul; and that not onely Animals, but alſo Vegetables, Minerals and Elements, ~~and what more is in Nature,~~ are endued with this Life and Soul, Senſe and Reaſon: and becauſe this Life and Soul is a corporeal Subſtance, it is both dividable and compoſable; for it divides and removes parts from parts, as alſo compoſes and joyns parts to parts, and works in a perpetual motion without reſt; by which actions not any Creature can challenge a particular Life and Soul to it ſelf, but every Creature may have by the dividing and compoſing nature of this ſelf-moving matter more or fewer natural ſouls and lives.

Theſe and the like actions of corporeal Nature or natural Matter you may find more at large deſcribed in my afore-mentioned Book of *Philoſophical Opinions*, and more clearly repeated and explained in this preſent.

'Tis

'Tis true, the way of arguing I uſe, is common, but the Principles, Heads and Grounds of my Opinions are my own, not borrowed or ſtolen in the leaſt from any; and the firſt time I divulged them, was in the year 1653. ſince which time I have reviewed, reformed and reprinted them twice; for at firſt, as my Conceptions were new and my own, ſo my Judgment was young, and my Experience little, ſo that I had not ſo much knowledge as to declare them artificially and methodically; for as I mentioned before, I was always unapt to learn by the Rules of Art. But although they may be defective for want of Terms of Art, and artificial expreſsions, yet I am ſure they are not defective for want of Senſe and Reaſon: And if any one can bring more Senſe and Reaſon to diſprove theſe my opinions, I ſhall not repine or grieve, but either acknowledge my errour, if I find my ſelf in any, or defend them as rationally as I can, if it be but done juſtly and honeſtly, without deceit, ſpight, or malice; for I connot chuſe but acquaint you, *Noble Readers*, I have been informed, that if I ſhould be anſwered in my Writings, it would be done rather under the name and cover of a Woman, then of a Man, the reaſon is, becauſe no man dare or will ſet his name to the contradiction of a Lady; and to confirm you the better herein, there has one Chapter of my Book called *The Worlds Olio*, treating of a Monaſtical Life, been anſwer'd already in a little Pamphlet, under the name of a woman, although ſhe did little towards it; wherefore it being a Hermaphroditical Book, I judged it not worthy taking notice of. The like ſhall I do to any other that will anſwer this preſent work of mine, or contradict my opinions indirectly with fraud and de-

ceit. But I cannot conceive why it ſhould be a diſgrace to any man to maintain his own or others opinions againſt a woman, ſo it be done with reſpect and civility; but to become a cheat by diſſembling, and quit the Breeches for a Petticoat, meerly out of ſpight and malice, is baſe, and not fit for the honour of a man, or the maſculine ſex. Beſides, it will eaſily be known; for a Philoſopher or Philoſophereſs is not produced on a ſudden. Wherefore, although I do not care, nor fear contradiction, yet I deſire it may be done without fraud or deceit, ſpight and malice; and then I ſhall be ready to defend my opinions the beſt I can, whileſt I live, and after I am dead, I hope thoſe that are juſt and honorable will alſo defend me from all ſophiſtry, malice, ſpight and envy, for which Heaven will bleſs them. In the mean time, *Worthy Readers*, I ſhould rejoyce to ſee that my Works are acceptable to you, for if you be not partial, you will eaſily pardon thoſe faults you find, when you do conſider both my ſex and breeding; for which favour and juſtice, I ſhall always remain,

Your moſt obliged Servant,

M. N.

Phi-

Philoſophical Letters.

Sect. I.

I.

MADAM,

You have been pleaſed to ſend me the Works of four Famous and Learned *Authors*, to wit, of two moſt Famous Philoſophers of our Age, *Des Cartes*, and *Hobbs*, and of that Learned Philoſopher and Divine Dr. *More*, as alſo of that Famous Phyſician and Chymiſt *Van Helmont*. Which Works you have ſent me not onely to peruſe, but alſo to give my judgment of them, and to ſend you word by the uſual way of our Correſpondence, which is by Letters, how far, and wherein I do diſſent from theſe Famous Authors, their Opinions in *Natural Philoſophy*. To tell you truly, *Madam*, your Commands did at firſt much affright me, for it did appear, as if you had commanded me to get upon a high Rock, and fling my ſelf into the Sea,

where neither a Ship, nor a Plank, nor any kind of help was near to reſcue me, and ſave my life; but that I was forced to ſink, by reaſon I cannot ſwim: So I having no Learning nor Art to aſsiſt me in this dangerous undertaking, thought, I muſt of neceſsity periſh under the rough cenſures of my Readers, and be not onely accounted a fool for my labour, but a vain and preſumptuous perſon, to undertake things ſurpaſsing the ability of my performance; but on the other ſide I conſidered firſt, that thoſe Worthy Authors, were they my cenſurers, would not deny me the ſame liberty they take themſelves; which is, that I may diſſent from their Opinions, as well as they diſſent from others, and from amongſt themſelves: And if I ſhould expreſs more Vanity then Wit, more Ignorance then Knowledg, more Folly then Diſcretion, in being according to the Nature of our Sex, I hoped that my Maſculine Readers would civilly excuſe me, and my Female Readers could not juſtly condemn me. Next I conſidered with my ſelf, that it would be a great advantage for my Book called *Philoſophical Opinions*, as to make it more perſpicuous and intelligible by the oppoſition of other Opinions, ſince two oppoſite things placed near each other, are the better diſcerned; for I muſt confeſs, that when I did put forth my Philoſophical Work at firſt, I was not ſo well skilled in the Terms or Expreſsions uſual in *Natural Philoſophy*; and therefore for want of their knowledg, I could not declare my meaning ſo plainly and clearly as I ought to have done, which may be a ſufficient argument to my Readers, that I have not read heretofore any *Natural Philoſophers*, and taken ſome Light from them; but that my Opinions did meerly

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iſſue from the Fountain of my own Brain, without any other help or aſsiſtance. Wherefore ſince for want of proper Expreſsions, my named Book of *Philoſophy* was accuſed of obſcurity and intricacy, I thought your Commands would be a means to explain and clear it the better, although not by an Artificial way, as by Logical Arguments or Mathematical Demonſtrations, yet by expreſſing my Senſe and Meaning more properly and clearly then I have done heretofore: But the chief reaſon of all was, the Authority of your Command, which did work ſo powerfully with me, that I could not reſiſt, although it were to the diſgrace of my own judgment and wit; and therefore I am fully reſoved now to go on as far, and as well as the Natural ſtrength of my Reaſon will reach: But ſince neither the ſtrength of my Body, nor of my underſtanding, or wit, is able to mark every line, or every word of their works, and to argue upon them, I ſhall onely pick out the ground Opinions of the *aforementioned Authors, and thoſe which do directly* diſſent from mine, upon which I intend to make ſome few Reflections, according to the ability of my Reaſon; and I ſhall meerly go upon the bare Ground of *Natural Philoſophy*, and not mix Divinity with it, as many Philoſophers uſe to do, except it be in thoſe places, where I am forced by the Authors Arguments to reflect upon it, which yet ſhall be rather with an expreſsion of my ignorance, then a poſitive declaration of my opinion or judgment thereof; for I think it not onely an abſurdity, but an injury to the holy Profeſsion of Divinity to draw her to the Proofs in *Natural Philoſophy*; wherefore I ſhall ſtrictly follow the Guidance of *Natural Reaſon*, and keep to my own ground and Principles as much as I can;

which

which that I may perform the better, I humbly deſire the help and aſsiſtance of your Favour, that according to that real and intire Affection you bear to me, you would be pleaſed to tell me unfeignedly, if I ſhould chance to err or contradict but the leaſt probability of truth in any thing; for I honor Truth ſo much, as I bow down to its ſhadow with the greateſt reſpect and reverence; and I eſteem thoſe perſons moſt, that love and honor Truth with the ſame zeal and fervor, whether they be Ancient or Modern Writers.

Thus, *Madam*, although I am deſtitute of the help of Arts, yet being ſupported by your Favour and wiſe Directions, I ſhall not fear any ſmiles of ſcorn, or words of reproach; for I am confident you will defend me againſt all the miſchievous and poiſonous Teeth of malitious detractors. I ſhall beſides, implore the aſsiſtance of the Sacred Church, and the Learned Schools, to take me into their Protection, and ſhelter my weak endeavours: For though I am but an ignorant and ſimple Woman, yet I am their devoted and honeſt Servant, who ſhall never quit the reſpect and honor due to them, but live and die theirs, as alſo,

MADAM,

Your Ladiſhips

humble and faithful Servant.

MA-

II.

MADAM,

BEfore I begin my Reflections upon the Opinions of thoſe Authors you ſent me, I will anſwer firſt your Objection concerning the Ground of my Philoſophy, which is Infinite Matter: For you were pleaſed to mention, That you could not well apprehend; how it was poſsible, that many Infinites could be contained in one Infinite, ſince one Infinite takes up all Place Imaginary, leaving no room for any other; *Alſo*, if one Infinite ſhould be contained in an other Infinite, that which contains, muſt of neceſsity be bigger then that which is contained, whereby the Nater of Infinite would be loſt; as having no bigger nor *leſs, but being of an Infinite quantity.*

Firſt of all, *Madam*, there is no ſuch thing as All in Infinite, nor any ſuch thing as All the Place, for Infinite is not circumſcribed nor limited: Next, as for that one Infinite cannot be in an other Infinite, I anſwer, as well as one Finite can be in another Finite; for one Creature is not onely compoſed of Parts, but one Part lies within another, and one Figure within another, and one Motion within another. As for example, Animal Kind, have they not Internal and External Parts, and ſo Internal and External Motions? And are not Animals, Vegetables and Minerals incloſed in the Elements? But as for Infinites, you muſt know, *Madam*, that there are ſeveral kindes of Infinites. For there is firſt Infinite in quantity

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or bulk, that is ſuch a big and great Corporeal ſubſtance, which exceeds all bounds and limits of meaſure, and may be called Infinite in Magnitude. Next there is Infinite in Number, which exceeds all numeration and account, and may be termed Infinite in Multitude; Again there is Infinite in Quality; as for example, Infinite degrees of ſoftneſs, hardneſs, thickneſs, thinneſs, heat and cold, *&c.* alſo Infinite degrees of Motion, and ſo Infinite Creations, Infinite Compoſitions, Diſſolutions, Contractions, Dilations, Digeſtions, Expulſions; alſo Infinite degrees of Strength, Knowledg, Power, *&c.* Beſides there is Infinite in Time, which is properly named Eternal. Now, when I ſay, that there is but one Infinite, and that Infinite is the Onely Matter, I mean infinite in bulk and quantity. And this Onely matter, becauſe it is Infinite in bulk, muſt of neceſſity be diviſible into infinite Parts, that is, infinite in number, not in bulk or quantity; for though Infinite Parts in number make up one infinite in quantity, yet they conſidered in themſelves, cannot be ſaid Infinite, becauſe every Part is of a certain limited and circumſcribed Figure, Quantity and Proportion, whereas Infinite hath no limits nor bounds: beſides it is againſt the nature of a ſingle Part to be Infinite, or elſe there would be no difference between the Part and the whole, the nature of a Part requiring that it muſt be leſs then its whole, but all what is leſs hath a determined quantity, and ſo becomes finite. Therefore it is no abſurdity to ſay, that an Infinite may have both Finite and Infinite Parts, Finite in Quantity, Infinite in Number. But thoſe that ſay, if there were an Infinite Body, that each of its Parts muſt of neceſſity be Infinite too, are much miſtaken; for it is a contradiction

diction in the ſame Terms to ſay One Infinite Part, for the very Name of a Part includes a Finiteneſs, but take all parts of an Infinite Body together, then you may rightly ſay they are infinite. Nay Reaſon will inform you plainly, for example: Imagine an Infinite number of grains of Corn in one heap, ſurely if the number of Grains be Infinite, you muſt grant of neceſſity the bulk or body, which contains this infinite number of grains, to be Infinite too; to wit, Infinite in quantity, and yet you will find each Grain in it ſelf to be Finite. But you will ſay, an Infinite Body cannot have parts, for if it be Infinite, it muſt be Infinite in Quantity, and therefore of one bulk, and one continued quantity, but Infinite parts in number make a diſcrete quantity. I anſwer it is all one; for a Body of a continued quantity may be divided and ſevered into ſo many Parts either actually, or mentally in our Conceptions or thoughts; beſides nature is one continued Body, for there is no ſuch *Vacuum* in Nature, *as if her Parts did hang together like a linked Chain*; nor can any of her Parts ſubſiſt ſingle and by it ſelf, but all the Parts of Infinite Nature, although they are in one continued Piece, yet are they ſeveral and diſcerned from each other by their ſeveral Figures. And by this, I hope, you will underſtand my meaning, when I ſay, that ſeveral Infinites may be included or comprehended in one Infinite; for by the one Infinite, I underſtand Infinite in Quantity, which includes Infinite in Number, that is Infinite Parts; then Infinite in Quality, as Infinite degrees of Rarity, Denſity, Swiftneſs, Slowneſs, Hardneſs, Softneſs, *&c.* Infinite degrees of Motions, Infinite Creations, Diſſolutions, Contractions, Dilations, Alterations, *&c.* Infinite

finite degres of Wiſdom, Strength, Power, *&c.* and laſtly Infinite in Time or Duration, which is Eternity, for Infinite and Eternal are inſeparable; All which Infinites are contained in the Onely Matter as many Letters are contained in one Word, many Words in one Line many Lines in one Book. But you will ſay perhaps if I attribute an Infinite Wiſdom, Strength Power, Knowledg, *&c.* to Nature; then Nature is in all coequal with God, for God has the ſame Attributes I anſwer, Not at all; for I deſire you to underſtand me rightly, when I ſpeak of Infinite Nature, and when I ſpeak of the Infinite Deity, for there is great difference between them, for it is one thing a Deitical or Divine Infinite, and another a Natural Infinite; You know, that God is a Spirit, and not a bodily ſubſtance, again that Nature is a Body, and not a Spirit, and therefore none of theſe Infinites can obſtruct or hinder each other, as being different in their kinds, for a Spirit being no Body, requires ~~no place, Place being an attribute which~~ onely belongs to a Body, and therefore when I call Nature Infinite, I mean an Infinite extenſion of Body, containing an Infinite number of Parts; but what doth an Infinite extenſion of Body hinder the Infiniteneſs of God as an Immaterial Spiritual being? Next, when I do attribute an Infinite Power, Wiſdom, Knowledg, *&c.* to Nature, I do not underſtand a Divine, but a Natural Infinite Wiſdom and Power, that is, ſuch as properly belongs to Nature, and not a ſupernatural, as is in God; For Nature having Infinite parts of Infinite degrees, muſt alſo have an Infinite natural wiſdom to order her natural Infinite parts and actions, and conſequently an Infinite natural power to put her wiſdom into

into act; and ſo of the reſt of her attributes, which are all natural: But Gods Attributes being ſupernatural, tranſcend much theſe natural infinite attributes; for God, being the God of Nature, has not onely Natures Infinite Wiſdom and Power, but beſides, a Supernatural and Incomprehenſible Infinite Wiſdom and Power; which in no wayes do hinder each other, but may very well ſubſiſt together. Neither doth Gods Infinite Juſtice and his Infinite Mercy hinder each other; for Gods Attributes, though they be all ſeveral Infinites, yet they make but one Infinite.

But you will ſay, If Nature's Wiſdom and Power extends no further then to natural things, it is not Infinite, but limited and reſtrained. I anſwer, That doth not take away the Infiniteneſs of Nature; for there may be ſeveral kinds of Infinites, as I related before, and one may be as perfect an Infinite as the other in its kind. For example: Suppoſe a Line to be extended infinitely in length, you will call this Line Infinite, although it have not an Infinite breadth: Alſo, if an infinite length and breadth joyn together, you will call it, an Infinite Superficies, although it wants an infinite depth; and yet every Infinite, in its kinde, is a Perfect Infinite, if I may call it ſo: Why then ſhall not Nature alſo be ſaid to have an Infinite Natural Wiſdom and Power, although ſhe has not a Divine Wiſdom and Power? Can we ſay, Man hath not a free Will, becauſe he hath not an abſolute free Will, as God hath? Wherefore, a Natural Infinite, and the Infinite God, may well ſtand together, without any oppoſition or hinderance, or without any detracting or derogating from the Omnipotency and Glory of God; for God remains ſtill the God of

Nature, and is an Infinite Immaterial Purity, when as Nature is an Infinite Corporeal Subſtance; and Immaterial and Material cannot obſtruct each other. And though an Infinite Corporeal cannot make an Infinite Immaterial, yet an Infinite Immaterial can make an Infinite Corporeal, by reaſon there is as much difference in the Power as in the Purity: And the diſparity between the Natural and Divine Infinite is ſuch, as they cannot joyn, mix, and work together, unleſs you do believe that Divine Actions can have allay.

But you may ſay, Purity belongs onely to natural things, and none but natural bodies can be ſaid purified, but God exceeds all Purity. 'Tis true: But if there were infinite degrees of Purity in Matter, Matter might at laſt become Immaterial, and ſo from an Infinite Material turn to an Infinite Immaterial, and from Nature to be God: A great, but an impoſsible Change. For I do verily believe, that there can be but one Omnipotent God, and he cannot admit of addition, or diminution; and that which is Material cannot be Immaterial, and what is Immaterial cannot become Material, I mean, ſo, as to change their natures; for Nature is what God was pleaſed ſhe ſhould be; and will be what ſhe was, until God be pleaſed to make her otherwiſe. Wherefore there can be no new Creation of matter, motion, or figure; nor any annihilation of any matter, motion, or figure in Nature, unleſs God do create a new Nature: For the changing of Matter into ſeveral particular Figures, doth not prove an annihilation of particular Figures; nor the ceſſation of particular Motions an annihilation of them: Neither doth the variation of the Onely Matter produce an annihilation of any

part

part of Matter, nor the variation of figures and motions of Matter cauſe an alteration in the nature of Onely Matter: Wherefore there cannot be new Lives, Souls or Bodies in Nature; for, could there be any thing new in Nature, or any thing annihilated, there would not be any ſtability in Nature, as a continuance of every kind and ſort of Creatures, but there would be a confuſion between the new and old matter, motions, and figures, as between old and new Nature; In truth, it would be like new Wine in old Veſſels, by which all would break into diſorder. Neither can ſupernatural and natural effects be mixt together, no more then material and immaterial things or beings: Therefore it is probable, God has ordained Nature to work in her ſelf by his Leave, Will, and Free Gift. But there have been, and are ſtill ſtrange and erroneous Opinions, and great differences amongſt Natural Philoſophers, concerning the Principles of Natural things; ſome will have them *Atoms*, others will have the firſt Principles to be *Salt*, *Sulphur* and *Mercury*; ſome will have them to be the four Elements, as *Fire*, *Air*, *Water*, and *Earth*; and others will have but one of theſe Elements; alſo ſome will have *Gas* and *Blas*, *Ferments*, *Idea's*, and the *like*; but what they believe to be Principles and Cauſes of natural things, are onely Effects; for in all Probability it appears to humane ſenſe and reaſon, that the cauſe of every particular material Creature is the onely and Infinite Matter, which has Motions and Figures inſeparably united; for Matter, Motion and Figure, are but one thing, individable in its Nature. And as for Immaterial Spirits, there is ſurely no ſuch thing in Infinite Nature, to wit, ſo as to be Parts of Nature; for

Nature

Nature is altogether Material, but this opinion proceeds from the ſeparation or abſtraction of Motion form Matter, *viz.* that man thinks matter and motion to be dividable from each other, and believes motion to be a thing by its ſelf, naming it an Imaterial thing, which has a being, but not a bodily ſubſtance: But various and different effects do not prove a different Matter or Cauſe, neither do they prove an unſetled Cauſe, onely the variety of Effects hath obſcured the Cauſe from the ſeveral parts, which makes Particular Creatures partly Ignorant, and partly knowing. But in my opinion, Nature is material, and not any thing in Nature, what belongs to her, is immaterial; but whatſoever is Immaterial, is Supernatural, Therefore Motions, Forms, Thoughts, Ideas, Conceptions, Sympathies, Antipathies, Accidents, Qualities, as alſo Natural Life, and Soul, are all Material: And as for Colours, Sents, Light, Sound, Heat, Cold, and the like, thoſe that believe them not to be ſubſtances or material things, ſurely their brain or heart (take what place you will for the forming of Conceptions) moves very Irregularly, and they might as well ſay, Our ſenſitive Organs are not material; for what Objects ſoever, that are ſubject to our ſenſes, cannot in ſenſe be denied to be Corporeal, when as thoſe things that are not ſubject to our ſenſes, can be conceived in reaſon to be Immaterial? But ſome Philoſophers ſtriving to expreſs their wit, obſtruct reaſon; and drawing Divinity to prove Senſe and Reaſon, weaken Faith ſo, as their mixed Divine Philoſophy becomes meer Poetical Fictions, and Romancical expreſsions, making material Bodies immaterial Spirits, and immaterial Spirits material Bodies; and ſome have conceived ſome

things.

things neither to be Material nor Immaterial, but between both. Truly, *Madam*, I wiſh their Wits had been leſs, and their Judgments more, as not to jumble Natural and Supernatural things together, but to diſtinguiſh either clearly, for ſuch Mixtures are neither Natural nor Divine; But as I ſaid, the Confuſion comes from their too nice abſtractions, and from the ſeparation of Figure and Motion from Matter, as not conceiving them individable; but if God, and his ſervant Nature were as Intricate and Confuſe in their Works, as Men in their Underſtandings and Words, the Univerſe and Production of all Creatures would ſoon be without Order and Government, ſo as there would be a horrid and Eternal War both in Heaven, and in the World, and ſo pittying their troubled Brains, and wiſhing them the Light of Reaſon, that they may clearly perceive the Truth, I reſt

MADAM,

Your real Friend

and faithful Servant.

III.

MADAM,

IT ſeems you are offended at my Opinion, that *Nature* is Eternal without beginning, which, you ſay, is to make her God, or at leaſt coeqnal with God; But, if you apprehend my meaning rightly, you will ſay;

ſay, I do not: For firſt, God is an Immaterial and Spiritual Infinite Being, which Propriety God cannot give away to any Creature, nor make another God in Eſſence like to him, for Gods Attributes are not communicable to any Creature; Yet this doth not hinder, that God ſhould not make Infinite and Eternal Matter, for that is as eaſie to him, as to make a Finite Creature, Infinite Matter being quite of another Nature then God is, to wit, Corporeal, when God is Incorporeal, the difference whereof I have declared in my former Letter. But as for *Nature*, that it cannot be Eternal without beginning, becauſe God is the Creator and Cauſe of it, and that the Creator muſt be before the Creature, as the Cauſe before the Effect, ſo, that it is impoſsible for *Nature* to be without a beginning; if you will ſpeak naturally, as humane reaſon guides you, and bring an Argument concluding from the Priority of the *Cauſe* before the *Effect*, give me leave to tell you, that God is not tied to Natural Rules, but that he can do beyond our Underſtanding, and therefore he is neither bound up to time, as to be before, for if we will do this, we muſt not allow, that the Eternal Son of God is Coeternal with the Father, becauſe nature requires a Father to exiſt before the Son, but in God is no time, but all Eternity; and if you allow, that God hath made ſome Creatures, as Supernatural Spirits, to live Eternally, why ſhould he not as well have made a Creature from all Eternity? for Gods making is not our making, he needs no Priority of Time: But you may ſay, the Compariſon of the Eternal Generation of the Son of God is Myſtical and Divine, and not to be applied to natural things: I anſwer, The action by which God created the World or made

Nature,

Nature, was it natural or ſupernatural? ſurely you will ſay it was a Supernatural and God-like action, why then will you apply Natural Rules to a God-like and Supernatural Action? for what Man knows, how and when God created Nature? You will ſay, the Scripture doth teach us that, for it is not Six thouſand years, when God created this World. I anſwer, the holy Scripture informs us onely of the Creation of this Viſible World, but not of Nature and natural Matter; for I firmly believe according to the Word of God, that this World has been Created, as is deſcribed by *Moſes*, but what is that to natural Matter? There may have been worlds before, as many are of the opinion that there have been men before *Adam*, and many amongſt Divines do believe, that after the deſtruction of this World God will Create a new World again, as a new Heaven, and a new Earth; and if this be probable, or at leaſt may be believed without any prejudice to the holy Scripture, why may it not be probably believed that there have been other worlds before this viſible World? for nothing is impoſsible with God; and all this doth derogate nothing from the Honour and Glory of God, but rather increaſes his Divine Power. But as for the Creation of this preſent World, it is related, that there was firſt a rude and indigeſted Heap, or Chaos, without form, void and dark; and God ſaid, *Let it be light; Let there be a Firmament in the midſt of the Waters, and let the Waters under the Heaven be gathered together, and let the dry Land appear; Let the Earth bring forth Graſs, the Herb yielding ſeed, and the Fruit-tree yielding Fruit after its own kind; and let there be Lights in the Firmament, the one to rule the Day, and*

the

the other the Night; and let the Waters bring forth abundantly the moving Creature that hath life; and let the Earth bring forth living Creatures after its kinde; and at laſt God ſaid, Let us make Man, and all what was made, God ſaw it was good. Thus all was made by Gods Command, and who executed his Command but the Material ſervant of God, Nature? which ordered her ſelf-moving matter into ſuch ſeveral Figures as God commanded, and God approved of them. And thus, *Madam*, I verily believe the Creation of the World, and that God is the Sole and omnipotent Creator of Heaven and Earth, and of all Creatures therein; nay, although I believe Nature to have been from Eternity, yet I believe alſo that God is the God and Author of Nature, and has made Nature and natural Matter in a way and manner proper to his Omnipotency and Incomprehenſible by us: I will paſs by natural Arguments and Proofs, as not belonging to ſuch an Omnipotent Action; as for example, how the nature of relative terms requires, that they muſt both exiſt at one point of Time, *viz.* a Maſter and his Servant, and a King and his Subjects; for one bearing relation to the other, can in no ways be conſidered as different from one another in formilineſs or laterneſs of Time; but as I ſaid, theſe being meerly natural things, I will nor cannot apply them to Supernatural and Divine Actions; But if you ask me, how it is poſsible that *Nature*, the Effect and Creature of God, can be Eternal without beginning? I will deſire you to anſwer me firſt, how a Creature can be Eternal without end, as, for example, Supernatural Spirits are, and then I will anſwer you, how a Creature can be Eternal without beginning;

For

For Eternity conſiſts herein, that it has neither beginning nor end; and if it be eaſie for God to make a Being without end, it is not difficult for Him to make a Being without beginning. One thing more I will add, which is, That if *Nature* has not been made by God from all Eternity, then the Title of God, as being a Creator, which is a Title and action, upon which our Faith is grounded, (for it is the firſt Article in our Creed) has been acceſſory to God, as I ſaid, not full Six thouſand years ago; but there is not any thing acceſſory to God, he being the Perfection himſelf. But, *Madam*, all what I ſpeak, is under the liberty of Natural Philoſophy, and by the Light of Reaſon onely, not of Revelation; and my Reaſon being not infallible, I will not declare my Opinions for an infallible Truth: Neither do I think, that they are offenſive either to Church or State, for I ſubmit to the Laws of One, and believe the Doctrine of the Other, ſo much, that if it were for the advantage of either, I ſhould be willing to ſacrifice my Life, eſpecially for the Church; yea, had I millions of Lives, and every Life was either to ſuffer torment or to live in eaſe, I would prefer torment for the benefit of the Church; and therefore, if I knew that my Opinions ſhould give any offence to the Church, I ſhould be ready every minute to alter them: And as much as I am bound in all duty to the obedience of the Church, as much am I particularly bound to your Ladiſhip, for your entire love and ſincere affection towards me, for which I ſhall live and die,

MADAM,

Your moſt faithful Friend,
and humble Servant.

IV.

MADAM,

I Have choſen, in the firſt place, the Work of that famous Philoſopher *Hobbs*, called *Leviathan*, wherein I find he ſayes, * *That the cauſe of ſenſe or ſenſitive perception is the external body or Object, which preſſes the Organ proper to each Senſe.* To which I anſwer, according to the ground of my own *Philoſophical Opinions*, That all things, and therefore outward objects as well as ſenſitive organs, have both Senſe and Reaſon, yet neither the objects nor the organs are the cauſe of them; for Perception is but the effect of the Senſitive and rational Motions, and not the Motions of the Perception, neither doth the preſſure of parts upon parts make Perception; for although Matter by the power of ſelf-motion is as much compoſeable as divideable, and parts do joyn to parts, yet that doth not make perception; nay, the ſeveral parts, betwixt which the Perception is made, may be at ſuch a diſtance, as not capable to preſs: As for example, Two men may ſee or hear each other at a diſtance, and yet there may be other bodies between them, that do not move to thoſe perceptions, ſo that no preſſure can be made, for all preſſures are by ſome conſtraint and force; wherefore, according to my Opinion, the Senſitive and Rational free Motions, do pattern out each others object, as Figure and Voice in each others Eye and Ear; for Life and Knowledge, which I name Rational and Senſitive Matter, are in every Creature, and

in all parts of every Creature, and make all perceptions in Nature, becauſe they are the ſelf-moving parts of Nature, and according as thoſe Corporeal, Rational, and Senſitive Motions move, ſuch or ſuch perceptions are made: But theſe ſelf-moving parts being of different degrees (for the Rational matter is purer then the Senſitive) it cauſes a double perception in all Creatures, whereof one is made by the Rational corporeal motions, and the other by the Senſitive; and though both perceptions are in all the body, and in every part of the body of a Creature, yet the ſenſitive corporeal motions having their proper organs, as Work-houſes, in which they work ſome ſorts of perceptions, thoſe perceptions are moſt commonly made in thoſe organs, and are double again; for the ſenſitive motions work either on the inſide or on the outſide of thoſe organs, on the inſide in Dreams, on the out-ſide awake; and although both the Rational and the Senſitive matter are inſeparably joyned and mixed together, yet do they not always work together, for oftentimes the Rational works without any ſenſitive paterns, and the ſenſitive again without any rational paterns. But miſtake me not, *Madam*, for I do not abſolutely confine the ſenſitive perception to the Organs, nor the rational to the Brain, but as they are both in the whole body, ſo they may work in the whole body according to their own motions. Neither do I ſay, that there is no other perception in the Eye but ſight, in the Ear but hearing, and ſo forth, but the ſenſitive organs have other perceptions beſides theſe; and if the ſenſitive and rational motions be irregular in thoſe parts, between which the perception is made, as for example, in the two fore-mentioned men, that ſee and hear each other,

then

then they both neither ſee nor hear each other perfectly; and if one's motions be perfect, but the other's irregular and erroneous, then one ſees and hears better then the other; or if the Senſitive and Rational motions move more regularly and make perfecter paterns in the Eye then in the Ear, then they ſee better then they hear; and if more regularly and perfectly in the Ear then in the Eye, they hear better then they ſee: And ſo it may be ſaid of each man ſingly, for one man may ſee the other better and more perfectly, then the other may ſee him; and this man may hear the other better and more perfectly, then the other may hear him; whereas, if perception were made by preſſure, there would not be any ſuch miſtakes; beſides the hard preſſure of objects, in my opinion, would rather annoy and obſcure, then inform. But as ſoon as the object is removed, the Perception of it, made by the ſenſitive motions in the Organs, ceaſeth, by reaſon the ſenſitive Motions ceaſe from paterning, but yet the *Rational Motions* do not always ceaſe ſo ſuddenly, becauſe the ſenſitive corporeal Motions work with the Inanimate Matter, and therefore cannot retain particular figures long, whereas the Rational Matter doth onely move in its own ſubſtance and parts of matter, and upon none other, as my Book of Philoſophical Opinions will inform you better. And thus Perception, in my opinion, is not made by Preſſure, nor by Species, nor by matter going either from the Organ to the Object, or from the Object into the Organ. By this it is alſo manifeſt, that Underſtanding comes not from Exterior Objects, or from the Exterior ſenſitive Organs; for as Exterior Objects do not make Perception, ſo they do neither make

Un-

Underſtanding, but it is the rational matter that doth it, for Underſtanding may be without exterior objects and ſenſitive organs; And this in ſhort is the opinion of

MADAM,

Your faithful Friend

and Servant.

V

MADAM,

YOur Authours opinion is, * that *when a thing lies ſtill, unleſs ſomewhat elſe ſtir it, it will lie ſtill for ever; but when a thing is in motion, it will eternally be in motion, unleſs ſomewhat elſe ſtay it; the reaſon is,* ſaith he, *becauſe nothing can change it ſelf*; To tell you truly, *Madam*, I am not of his opinion, for if Matter moveth it ſelf, as certainly it doth, then the leaſt part of Matter, were it ſo ſmall as to ſeem Individable, will move it ſelf; 'Tis true, it could not deſiſt from motion, as being its nature to move, and no thing can change its Nature; for God himſelf, who hath more power then ſelf-moving Matter, cannot change himſelf from being God; but that Motion ſhould proceed from another exterior Body, joyning with, or touching that body which it moves, is in my opinion not probable; for though Nature is all Corporeal, and her actions are Corporeal Motions, yet that doth not prove, that the Motion of particular

* *Leviathan Part. 1. c. 2.*

Creatures or Parts is cauſed by the joining, touching or preſsing of parts upon parts; for it is not the ſeveral parts that make motion, but motion makes them; and yet Motion is not the cauſe of Matter, but Matter is the cauſe of Motion, for Matter might ſubſiſt without Motion, but not Motion without Matter, onely there could be no perception without Motion, nor no Variety, if Matter were not ſelf-moving; but Matter, if it were all Inanimate and void of Motion, would lie as a dull, dead and ſenſeleſs heap; But that all Motion comes by joining or preſsing of other parts, I deny, for if ſenſitive and rational perceptions, which are ſenſitive and rational motions, in the body, and in the mind, were made by the preſſure of outward objects, preſsing the ſenſitive organs, and ſo the brain or interior parts of the Body, they would cauſe ſuch dents and holes therein, as to make them ſore and patched in a ſhort time; Beſides, what was repreſented in this manner, would always remain, or at leaſt not ſo ſoon be diſſolved, and then thoſe preſſures would make a ſtrange and horrid confuſion of Figures, for not any figure would be diſtinct; Wherefore my opinion is, that the ſenſitive and rational Matter doth make or pattern out the figures of ſeveral Objects, and doth diſſolve them in a moment of time; as for example, when the eye ſeeth the object firſt of a Man, then of a Horſe, then of another Creature, the ſenſitive motions in the eye move firſt into the figure of the Man, then ſtraight into the figure of the Horſe, ſo that the Mans figure is diſſolved and altered into the figure of the Horſe, and ſo forth; but if the eye ſees many figures at once, then ſo many ſeveral figures are made by the ſenſitive. Corporeal Motions,

and

and as many by the Rational Motions, which are Sight and Memory, at once: But in ſleep both the ſenſitive and rational Motions make the figures without patterns, that is, exterior objects, which is the cauſe that they are often erroneous, whereas, if it were the former Impreſsion of the Objects, there could not poſsibly be imperfect Dreams or Remembrances, for fading of Figures requires as much motion, as impreſsion, and impreſsion and fading are very different and oppoſite motions; nay, if Perception was made by Impreſsion, there could not poſsibly be a fading or decay of the figures printed either in the Mind or Body, whereas yet, as there is alteration of Motions in ſelf-moving Matter, ſo there is alſo an alteration of figures made by theſe motions. But you will ſay, it doth not follow, if Perception be made by Impreſsion, that it muſt needs continue and not decay; for if you touch and move a ſtring, the motion doth not continue for ever, but ceaſeth by degrees; I anſwer, There is great difference between Prime ſelf-motion, and forced or Artificial Motions; for Artificial Motions are onely an Imitation of Natural Motions, and not the ſame, but cauſed by Natural Motions; for although there is no Art that is not made by Nature, yet Nature is not made by Art; Wherefore we cannot rationally judg of Perception by comparing it to the motion of a ſtring, and its alteration to the ceaſing of that motion, for Nature moveth not by force, but freely. 'Tis true, 'tis the freedom in Nature for one man to give another a box on the Ear, or to trip up his heels, or for one or more men to fight with each other; yet theſe actions are not like the actions of loving Imbraces and Kiſsing each other; neither are the

actions

actions one and the ſame, when a man ſtrikes himſelf, and when he ſtrikes another; and ſo is likewiſe the action of impreſsion, and the action of ſelf-figuring not one and the ſame, but different; for the action of impreſsion is forced, and the action of ſelf-figuring is free; Wherefore the compariſon of the forced motions of a ſtring, rope, watch, or the like, can have no place here; for though the rope, made of flax or hemp, may have the perception of a Vegetable, yet not of the hand, or the like, that touched or ſtruck it; and although the hand doth occaſion the rope to move in ſuch a manner, yet it is not the motion of the hand, by which it moveth, and when it ceaſes, its natural and inherent power to move is not leſſened; like as a man, that hath left off carving or painting, hath no leſs skill then he had before, neither is that skill loſt when he plays upon the Lute or Virginals, or plows, plants, and the like, but he hath onely altered his action, as from carving to painting, or from painting to playing, and ſo to plowing and planting, which is not through diſability but choice. But you will ſay, it is nevertheleſs a ceſſation of ſuch a motion. I grant it: but the ceaſing of ſuch a motion is not the ceaſing of ſelf-moving matter from all motions, neither is ceſſation as much as annihilation, for the motion lies in the power of the matter to repeat it, as oft it will, if it be not overpowred, for more parts, or more ſtrength, or more motions may over-power the leſs; Wherefore forced, or artificial and free Natural motions are different in their effects, although they have but one Cauſe, which is the ſelf-moving matter, and though Matter is but active and paſsive, yet there is great Variety, and ſo great difference in force and liberty, objects and perceptions,

ceptions, ſenſe and reaſon, and the like. But to conclude, perception is not made by the preſſure of objects, no more then hemp is made by the Rope-maker, or metal by the Bell-founder or Ringer, and yet neither the rope nor the metal is without ſenſe and reaſon, but the natural motions of the metal, and the artificial motions of the Ringer are different; wherefore a natural effect in truth cannot be produced from an artificial cauſe, neither can the ceaſing of particular forced or artificial motions be a proof for the ceaſing of general, natural, free motions, as that matter it ſelf ſhould ceaſe to move; for there is no ſuch thing as reſt in Nature, but there is an alteration of motions and figures in ſelf-moving matter, which alteration cauſeth variety as well *in* opinions, as in every thing elſe; Wherefore in my opinion, though ſenſe alters, yet it doth not decay, for the rational and ſenſitive part of matter is as laſting as matter it ſelf, but that which is named decay of ſenſe, is onely the alteration of motions, and not an obſcurity of motions, like as the motions of memory and forgetfulneſs, and the repetition of the ſame motions is called remembrance. And thus much of this ſubject for the preſent, to which I add no more but reſt

MADAM,

Your faithful Friend,

and Servant.

VI.

MADAM,

Leviathan, part. 1. c. 2.

YOur Authour diſcourſing of Imagination, ſaith, * *That as ſoon as any object is removed from our Eyes, though the Impreſsion that is made in us, remain, yet other objects more preſent ſucceeding and working on us, the Imagination of the paſt is obſcured and made weak.* To which I anſwer, firſt, that he conceives Senſe and Imagination to be all one, for he ſays, *Imagination is nothing elſe, but a fading or decaying ſenſe*; whereas in my opinion they are different, not onely their matter, but their motions alſo being diſtinct and different; for Imagination is a rational perception, and ſenſe a ſenſitive perception; wherefore as much as the rational matter differs from the ſenſitive, as much doth Imagination differ from Senſe. Next I ſay, that Impreſsions do not remain in the body of ſenſitive matter, but it is in its power to make or repeat the like figures; Neither is Imagination leſs, when the object is abſent, then when preſent, but the figure patterned out in the ſenſitive organs, being altered, and remaining onely in the Rational part of matter, is not ſo perſpicuous and clear, as when it was both in the Senſe and in the Mind: And to prove that Imagination of things paſt doth not grow weaker by diſtance of time, as your Authour ſays, many a man in his old age, will have as perfect an Imagination of what is paſt in his younger years, as if he ſaw it preſent. And as for your Authours opinion, that *Imagination and Memory are one and the ſame*, I grant, that they are made

of one kind of Matter; but although the Matter is one and the ſame, yet ſeveral motions in the ſeveral parts make *Imagination* and Memory ſeveral things: As for Example, a Man may Imagine that which never came into his Senſes, wherefore Imagination is not one and the ſame thing with Memory. But your Authour ſeems to make all Senſe, as it were, one Motion, but not all Motion Senſe, whereas ſurely there is no Motion, but is either Senſitive or Rational; for Reaſon is but a pure and refined Senſe, and Senſe a groſſer Reaſon. Yet all ſenſitive and rational Motions are not one and the ſame; for forced or Artificial Motions, though they proceed from ſenſitive matter, yet are they ſo different from the free and Prime Natural Motions, that they ſeem, as it were, quite of another nature: And this diſtinction neglected is the Cauſe, that many make Appetites and Paſsions, Perceptions and Objects, and the like, as one, without any or but little difference. But having diſcourſed of the difference of theſe Motions in my former Letter, I will not be tedious to you, with repeating it again, but remain,

MADAM,

Your faithful Friend.

and Servant.

MA-

VII.

MADAM,

Leviathan, art. 1. c. 2.

YOur Authours opinion, concerning Dreams *, ſeemeth to me in ſome part very rational and probable, in ſome part not; For when he ſayes, that *Dreams are onely Imaginations of them that ſleep, which imaginations have been before either totally or by parcels in the Senſe; and that the organs of Senſe, as the Brain and the Nerves, being benumb'd in ſleep, as not eaſily to be moved by external objects, thoſe Imaginations proceed onely from the agitation of the inward parts of mans body, which for the connexion they have with the Brain, and other organs, when they be diſtemper'd, do keep the ſame in motion, whereby the Imaginations there formerly made, appear as if a man were waking*; This ſeems to my Reaſon not very probable: For, firſt, Dreams are not abſolutely Imaginations, except we do call all Motions and Actions of the Senſitive and Rational Matter, Imaginations. Neither is it neceſſary, that all Imaginations muſt have been before either totally or by parcels in the Senſe; neither is there any benumbing of the organs of Senſe in ſleep. But Dreams, according to my opinion, are made by the Senſitive and Rational Corporeal Motions, by figuring ſeveral objects, as awake; onely the difference is, that the Senſitive motions in Dreams work by rote and on the inſide of the Senſitive organs, when as awake they work according to the patterns of outward objects, and exterioufly or on the outſide of the Senſitive

ſenſitive Organs, ſo that ſleep or dreams are nothing elſe but an alteration of motions, from moving exteriouſly to move interiouſly, and from working after a Pattern to work by rote: I do not ſay that the body is without all exterior motions, when aſleep, as breathing and beating of the Pulſe (although theſe motions are rather interior then exterior,) but that onely the ſenſitive organs are outwardly ſhut, ſo as not to receive the patterns of outward Objects, nevertheleſs the ſenſitive Motions do not ceaſe from moving inwardly, or on the inſide of the ſenſitive Organs; But the rational matter doth often, as awake, ſo aſleep or in dreams, make ſuch figures, as the ſenſitive did never make either from outward objects, or of its own accord; for the ſenſitive hath ſometimes liberty to work without Objects, but the Rational much more, which is not bound either to the patterns of Exterior objects, or of the ſenſitive voluntary Figures. Wherefore it is not divers diſtempers, as your Authour ſayes, that cauſe different Dreams, or Cold, or Heat; neither are Dreams the reverſe of our waking Imaginations, nor all the Figures in Dreams are not made with their heels up, and their heads downwards, though ſome are; but this error or irregularity proceeds from want of exterior Objects or Patterns, and by reaſon the ſenſitive Motions work by rote; neither are the Motions reverſe, becauſe they work inwardly aſleep, and outwardly awake, for Mad-men awake ſee ſeveral Figures without Objects. In ſhort, ſleeping and waking is ſomewhat after that manner, when men are called either out of their doors, or ſtay within their houſes; or like a Ship, where the Mariners work

all under hatches, whereof you will find more in my Philoſophical Opinions; and ſo taking my leave, I reſt

MADAM,

Your faithful Friend

and Servant.

VIII.

MADAM,

YOur Authour going on in his diſcourſe of Imagination, ſays, [a] *That, as we have no Imagination, whereof we have not formerly had ſenſe, in whole or in parts; ſo we have not Tranſition from one Imagination to another, whereof we never had the like before in our ſenſes.* To which my anſwer is in ſhort, that the Rational part of Matter in one compoſed figure, as in Man, or the like Creature, may make ſuch figures, as the ſenſes did never make in that compoſed Figure or Creature; And though your Authour reproves thoſe that ſay, [b] *Imaginations riſe of themſelves*; yet, if the ſelf-moving part of Matter, which I call Rational, makes Imaginations, they muſt needs riſe of themſelves; for the Rational part of matter being free and ſelf-moving, depends upon nothing, neither Senſe nor Object, I mean, ſo, as not to be able to work without them. Next, when your Author, defining *Underſtanding*, ſays that it is nothing elſe, but [c] *an Imagination raiſed by words or other*

[a] *Leviathan, part. 1. c. 3.*

[b] *part. 1 c. 2.*

[c] *Ibid. c. 3.*

other voluntary ſigns, My Anſwer is, that Underſtanding, and ſo Words and Signs are made by ſelf-moving Matter, that is, Senſe and Reaſon, and not Senſe and Reaſon by Words and Signs; wherefore Thoughts are not like [d] *Water upon a plain Table, which is drawn and guided by the finger this or that way*, for every Part of ſelf-moving matter is not alwayes forced, perſwaded or directed, for if all the Parts of Senſe and Reaſon were ruled by force or perſwaſion, not any wounded Creature would fail to be healed, or any diſeaſe to be cured by outward Applications, for outward Applications to Wounds and Diſeaſes might have more force, then any Object to the Eye: But though there is great affinity and ſympathy between parts, yet there is alſo great difference and antipathy betwixt them, which is the cauſe that many objects cannot with all their endeavours work ſuch effects upon the Interiour parts, although they are cloſely preſs'd, for Impreſsions of objects do not always affect thoſe parts they preſs. Wherefore, *I am not of your Author's opinion, that all Parts of* Matter preſs one another; It is true, *Madam*, there cannot be any part ſingle, but yet this doth not prove, that parts muſt needs preſs each other: And as for his *Train of Thoughts*, I muſt confeſs, that Thoughts for the moſt part are made orderly, but yet they do not follow each other like Geeſe, for ſurely, man has ſometimes very different thoughts; as for Example, a man ſometime is very ſad for the death of his Friend, and thinks of his own death, and immediately thinks of a wanton Miſtreſs, which later thought, ſurely, the thought of Death did not draw in; wherefore, though ſome thought may be the Ring-leader of others, yet many

[d] *ibid.*

many are made without leaders. Again, your Author in his deſcription of the Mind ſayes, that *the diſcourſe of the mind, when it it is govern'd by deſign, is nothing but ſeeking, or the Faculty of Invention; a hunting out of the Cauſes of ſome Effects, preſent or paſt; or of the Effects of ſome preſent or paſt Cauſe. Sometimes a man ſeeks what he has loſt, and from that Place and Time wherein he miſſes it, his mind runs back from place to place, and time to time, to find where and when he had it, that is to ſay, to find ſome certain and limited Time and Place, in which to begin a method of Seeking. And from thence his thoughts run over the ſame places and times to find what action or other occaſion might make him loſe it. This we call Remembrance or calling to mind. Sometimes a man knows a place determinate, within the compaſs whereof he is to ſeek, and then his thonghts run over all the Parts thereof in the ſame manner as one would ſweep a room to find a Jewel, or as a Spaniel ranges the field till he find a ſent; or as a Man ſhould run over the Alphabet to ſtart a Rime.* Thus far your Author: In which diſcourſe I do not perceive that he defineth what the Mind is, but I ſay, that if, according to his opinion, nothing moves it ſelf, but one thing moves another, then the Mind muſt do nothing, but move backward and forward, nay, onely forward, and if all actions were thruſting or preſsing of parts, it would be like a crowd of People, and there would be but little or no motion, for the crowd would make a ſtoppage, like water in a glaſs, the mouth of the Glaſs being turned downwards, no water can paſs out, by reaſon the numerous drops are ſo cloſely preſs'd, as they cannot move exterioufly. Next, I cannot conceive how the Mind can run back either

either to Time or Place, for as for Place, the mind is incloſed in the body, and the running about in the parts of the body or brain will not inform it of an Exterior place or object; beſides, objects being the cauſe of the minds motion, it muſt return to its Cauſe, and ſo move until it come to the object, that moved it firſt, ſo that the mind muſt run out of the body to that object, which moved it to ſuch a Thought, although that object were removed out of the World (as the phraſe is:) But for the mind to move backward, to Time paſt, is more then it can do; Wherefore in my opinion, Remembrance, or the like, is onely a repetition of ſuch Figures as were like to the Objects; and for Thoughts in Particular, they are ſeveral figures, made by the mind, which is the Rational Part of matter, in its own ſubſtance, either voluntarily, or by imitation, whereof you may ſee more in my Book of Philoſophical Opinions. Hence I conclude, that Prudence is nothing elſe, but a comparing of Figures to Figures, and of the ſeveral actions of thoſe Figures, as repeating former Figures, and comparing them to others of the like nature, qualities, proprieties, as alſo chances, fortunes, *&c.* Which figuring and repeating is done actually, in and by the Rational Matter, ſo that all the obſervation of the mind on outward Objects is onely an actual repetition of the mind, as moving in ſuch or ſuch figures and actions; and when the mind makes voluntary Figures with thoſe repeated Figures, and compares them together, this comparing is Examination; and when ſeveral Figures agree and joyn, it is Concluſion or Judgment: likewiſe doth Experience proceed from repeating and comparing of ſeveral Figures in the Mind, and

the more ſeveral Figures are repeated and compared, the greater the experience is. One thing more there is in the ſame Chapter, which I cannot let paſs without examination; Your Authour ſays, That *things Preſent onely have a being in Nature, things Paſt onely a being in the Memory, but things to come have no being at all*; Which how it poſsibly can be, I am not able to conceive; for certainly, if nothing in nature is loſt or annihilated, what is paſt, and what is to come, hath as well a being, as what is preſent; and, if that which is now, had its being before, why may it not alſo have its being hereafter? It might as well be ſaid, that what is once forgot, cannot be remembred; for whatſoever is in Nature, has as much a being as the Mind, and there is not any action, or motion, or figure, in Nature, but may be repeated, that is, may return to its former Figure, when it is altered and diſſolved; But by reaſon Nature delights in variety, repetitions are not ſo frequently made, eſpecially of thoſe things or creatures, which are compoſed by the ſenſitive corporeal motions in the inanimate part of Matter, becauſe they are not ſo eaſily wrought, as the Rational matter can work upon its own parts, being more pliant in its ſelf, then the Inanimate matter is; And this is the reaſon, that there are ſo many repetitions of one and the ſame Figure in the Rational matter, which is the Mind, but ſeldom any in the Groſs and inanimate part of Matter, for Nature loves eaſe and freedom: But to conclude, *Madam*, I perceive your Author confines Senſe onely to Animal-kind, and Reaſon onely to Man-kind: Truly, it is out of ſelf-love, when one Creature prefers his own Excellency before another, for nature being endued with

ſelf-

ſelf-love, all Creatures have ſelf-love too, becauſe they are all Parts of Nature; and when Parts agree or diſagree, it is out of Intereſt and Self-love; but Man herein exceeds all the reſt, as having a ſupernatural Soul, whoſe actions alſo are ſupernatural: To which I leave him, and reſt,

MADAM,

Your faithful Friend

and Servant.

IX.

MADAM,

WHen your Author diſcourſeth of the uſe of *Speech or Words and Names*, he is pleas'd to ſay, * *That their uſe is to ſerve for marks and notes of Remembrance*; Whereof to give you my opinion, I ſay, That Speech is natural to the ſhape of Man; and though ſometimes it ſerves for marks or notes of remembrance, yet it doth not always, for all other Animals have Memory without the help of Speech, and ſo have deaf and dumb men, nay more then thoſe that hear and ſpeak: Wherefore, though Words are uſeful to the mind, and ſo to the memory, yet both can be without them, whereas Words cannot be without Memory; for take a Bird and teach him to ſpeak, if he had not Memory, before he heard the words, he could never learn them. You will ask me, *Madam*, What then,

* *Leviathan part. 1. c. 4.*

is

is Memory the Cauſe of Speech? I anſwer, Life and Knowledg, which is Senſe and Reaſon, as it creates and makes all ſorts of Creatures, ſo alſo amongſt the reſt it makes Words: And as I ſaid before, that Memory may be without the help of Speech or Words, ſo I ſay alſo, that there is a poſsibility of reckoning of numbers, as alſo of magnitudes, of ſwiftneſs, of force, and other things without words, although your Author denies it: But ſome men are ſo much for Art, as they endeavour to make Art, which is onely a Drudgery-maid of Nature, the chief Miſtreſs, and Nature her Servant, which is as much as to prefer Effects before the Cauſe, Nature before God, Diſcord before Unity and Concord.

Again, your *Author*, in his Chapter of Reaſon*, defines *Reaſon* to be nothing elſe but *Reckoning*: I anſwer, That in my opinion Reckoning *is not* Reaſon it ſelf, but onely an effect or action of Reaſon; for Reaſon, as it is the chiefeſt and pureſt degree of animate matter, works variouſly and in divers motions, by which *it produces various and divers effects, which* are ſeveral Perceptions, as Conception, Imagination, Fancy, Memory, Remembrance, Underſtanding, Judgment, Knowledg, and all the Paſsions, with many more: Wherefore this Reaſon is not in one undivided part, nor bound to one motion, for it is in every Creature more or leſs, and moves in its own parts variouſly; and in ſome Creatures, as for example, in ſome men, it moves more variouſly then in others, which is the cauſe that ſome men are more dull and ſtupid, then others; neither doth Reaſon always move in one Creature regularly, which is the cauſe, that ſome men are mad or fooliſh: And though all men are made by the direction of Reaſon,

Reaſon, and endued with Reaſon, from the firſt time of their birth, yet all have not the like Capacities, Underſtandings, Imaginations, Wits, Fancies, Paſsions, *&c.* but ſome more, ſome leſs, and ſome regular, ſome irregular, according to the motions of Reaſon or Rational part of animate matter; and though ſome rational parts may make uſe of other rational Parts, as one man of another mans Conceptions, yet all theſe parts cannot aſſociate together; as for example, all the Material parts of ſeveral objects, no not their ſpecies, cannot enter or touch the eye without danger of hurting or looſing it, nevertheleſs the eye makes uſe of the objects by patterning them out, and ſo doth the rational matter, by taking patterns from the ſenſitive; And thus knowledg or perception of objects, both ſenſitive and rational, is taken without the preſſure of any other parts; for though parts joyn to parts, (for no part can be ſingle) yet this joining doth not neceſſarily infer the preſſure of objects upon the ſenſitive organs; Whereof I have already diſcourſed ſufficiently heretofore, to which I refer you, and reſt

MADAM,

Your faithful Friend

and Servant.

MA-

X.

MADAM,

Leviathan, prt. 1. c. 4. UNderſtanding, ſays your Author, **is nothing elſe but Conception cauſed by ſpeech, and therefore, if ſpeech be peculiar to man, (as, for ought I know, it is) then is underſtanding peculiar to him alſo.* Where he confineth Underſtanding onely to ſpeech and to Mankind; But, by his leave, *Madam*, I ſurely believe, that there is more underſtanding in Nature, then that, which is in ſpeech, for if there were not, I cannot conceive, how all the exact forms in Generations could be produced, or how there could be ſuch diſtinct degrees of ſeveral ſorts and kinds of Creatures, or diſtinctions of times and ſeaſons, and ſo many exact motions and figures in Nature: Conſidering all this, my reaſon perſwadeth me, that all Underſtanding, which is a part of Knowledg, is not cauſed by ſpeech, for all the motions of the Celeſtial Orbs are not made by ſpeech, neither is the knowledg or underſtanding which a man hath, when ſick, as to know or underſtand he is ſick, made by ſpeech, nor by outward objects, eſpecially in a diſeaſe he never heard, nor ſaw, nor ſmelt, nor taſted, nor touched; Wherefore all Perception, Senſation, Memory, Imagination, Appetite, Underſtanding, and the like, are not made nor cauſed by outward objects, nor by ſpeech. And as for names of things, they are but different poſtures of the figures in our mind or thoughts, made by the Rational matter; But

reaſoning

Reaſoning is a comparing of the ſeveral figures with their ſeveral poſtures and actions in the Mind, which joyned with the ſeveral words, made by the ſenſitive motions, inform another diſtinct and ſeparate part, as an other man, of their minds conceptions, underſtanding, opinions, and the like.

Concerning Addition and Subſtraction, wherein your *Author* ſayes Reaſoning conſiſts, I grant, that it is an act of Reaſoning, yet it doth not make Senſe or Reaſon, which is Life and Knowledge, but Senſe and Reaſon which is ſelf-motion, makes addition and ſubſtraction of ſeveral Parts of matter; for had matter not ſelf-motion, it could not divide nor compoſe, nor make ſuch varieties, without great and lingring retardments, *if not confuſion.* Wherefore all, what is made in Nature, is made by ſelf-moving matter, which ſelf-moving matter doth not at all times move regularly, but often irregularly, which cauſes falſe Logick, falſe *Arithmetick, and the like; and if there be not a certainty in theſe ſelf-motions* or *actions* of Nature, much leſs in Art, which is but a ſecundary action; and therefore, neither ſpeech, words, nor exterior objects cauſe Underſtanding or Reaſon. And although many parts of the Rational and Senſitive Matter joyned into one, may be ſtronger by their aſſociation, and over-power other parts that are not ſo well knit and united, yet theſe are not the leſs pure; onely theſe Parts and Motions being not equal in ſeveral Creatures, make their Knowledge and Reaſon more or leſs: For, when a man hath more Rational Matter well regulated, and ſo more Wisdom then an other, that ſame man may chance to over-power the other, whoſe Rational Matter is more irregular,

regular, but yet not ſo much by ſtrength of the united Parts, as by their ſubtilty; for the Rational Matter moving regularly, is more ſtrong with ſubtilty; then the ſenſitive with force; ſo that Wiſdom is ſtronger then Life, being more pure, and ſo more active; for in my opinion, there is a degree of difference between Life and Knowledge, as my Book of *Philoſophical Opinions* will inform you.

Again, your *Author* ſayes, *That Man doth excel all other Animals in this faculty, that when he conceives any thing whatſoever, he is apt to enquire the Conſequences of it, and what effects he can do with it: Beſides this* (ſayes he) *Man hath an other degree of Excellence, that he can by Words reduce the Conſequences he finds to General Rules called Theoremes or Aphoriſms, that is, he can reaſon or reckon not onely in Number, but in all other things, whereof one may be added unto, or ſubſtracted from an other.* To which I anſwer, That according to my Reaſon I cannot perceive, but that all Creatures may do as much; but by reaſon they do it not after the ſame manner or way as Man, Man denies, they can do it at all; which is very hard; for what man knows, whether Fiſh do not Know more of the nature of Water, and ebbing and flowing, and the ſaltneſs of the Sea? or whether Birds do not know more of the nature and degrees of Air, or the cauſe of Tempeſts? or whether Worms do not know more of the nature of Earth, and how Plants are produced? or Bees of the ſeveral ſorts of juices of Flowers, then Men? And whether they do not make there Aphoriſmes and Theoremes by their manner of Intelligence? For, though they have not the ſpeech of Man, yet thence doth not follow

follow, that they have no Intelligence at all: But the Ignorance of Men concerning other Creatures is the cauſe of deſpiſing other Creatures, imagining themſelves as petty Gods in Nature, when as *Nature* is not capable to make one God, much leſs ſo many as Mankind; and were it not for Mans ſupernatural Soul, Man would not be more Supreme, then other Creatures in Nature. *But* (ſays your *Author*) *this Priviledge in Man is allay'd by another, which is, No living Creature is ſubject to abſurdity, but onely Man.* Certainly, *Madam*, I believe the contrary, to wit, that all other Creatures do as often commit miſtakes and abſurdities as Man, and if it were not to avoid tedioufneſs, I could preſent ſufficient proofs to you: Wherefore I think, not onely Man but alſo other Creatures may be Philoſophers and ſubject to abſurdities as aptly as Men; for Man doth, nor cannot truly know the Faculties, and Abilities or Actions of all other Creatures, no not of his own *Kind as Man-Kind*, for if he do meaſure all men by himſelf he will be very much miſtaken, for what he conceives to be true or wiſe, an other may conceive to be falſe and fooliſh. But Man may have one way of Knowledge in Philoſophy and other Arts, and other Creatures another way, and yet other Creatures manner or way may be as Intelligible and Inſtructive to each other as Mans, I mean, in thoſe things which are Natural. Wherefore I cannot conſent to what your *Author* ſays, *That Children are not endued with Reaſon at all, till they have attained to the uſe of Speech*; for Reaſon is in thoſe Creatures which have not Speech, witneſs Horſes, eſpecially thoſe which are taught in the manage, and many other Animals. And as for the

weak underſtanding in Children, I have diſcourſed thereof in my Book of Philoſophy; The reſt of this diſcourſe, leſt I tyre you too much at once, I ſhall reſerve for the next, reſting in the mean time,

MADAM,

Your faithful Friend,

and Servant.

XI.

MADAM,

I ſent you word in my laſt, that your *Author's* opinion is, *That Children are not endued with Reaſon at all, until they have attained to the uſe of Speech*, in the ſame Chapter * he ſpeaks to the ſame purpoſe thus: *Reaſon is not as Senſe and Memory born with us, nor gotten by experience onely, as Prudence is, but attained by induſtry.* To which I reply onely this, That it might as well be ſaid, a Child when new born hath not fleſh and blood, becauſe by taking in nouriſhment or food, the Child grows to have more fleſh and blood; or, that a Child is not born with two legs, becauſe he cannot go, or with two arms and hands, becauſe he cannot help himſelf; or that he is not born with a tongue, becauſe he cannot ſpeak: For although Reaſon doth not move in a Child as in a Man, in Infancy as in Youth, in Youth as in Age, yet that doth not prove that Children are without Reaſon, becauſe they cannot run and prate;

* Ch. 4.

I grant, ſome other Creatures appear to have more Knowledg when new born then others; as for example, a young Foal has more knowledg than a young Child, becauſe a Child cannot run and play; beſides a Foal knows his own Dam, and can tell where to take his food, as to run and ſuck his Dam, when as an Infant cannot do ſo, nor all beaſts, though moſt of them can, but yet this doth not prove, that a Child hath no reaſon at all; Neither can I perceive that man is a Monopoler of all Reaſon, or Animals of all Senſe, but that Senſe and Reaſon are in other Creatures as well as in Man and Animals; for example, Drugs, as Vegetables and Minerals, although they cannot ſlice, pound or infuſe, as man can, yet they can work upon man more ſubtilly, wiſely, and as ſenſibly either by purging, vomiting, ſpitting, or any other way, as man by mincing, pounding and infuſing them, and Vegetables will as wiſely nouriſh Men, as Men can nouriſh Vegetables; Alſo *ſome Vegetables are as malicious and miſchievous to* Man, as Man is to one another, witneſs Hemlock, Nightſhade, and many more; and a little Poppy will as ſoon, nay ſooner cauſe a Man to ſleep, though ſilently, then a Nurſe a Child with ſinging and rocking; But becauſe they do not act in ſuch manner or way as Man, Man judgeth them to be without ſenſe and reaſon; and becauſe they do not prate and talk as Man, Man believes they have not ſo much wit as he hath; and becauſe they cannot run and go, Man thinks they are not induſtrious; the like for Infants concerning Reaſon: But certainly, it is not local motion or ſpeech that makes ſenſe and reaſon, but ſenſe and reaſon makes them; neither is ſenſe and reaſon bound onely to the actions of

Man,

Man, but it is free to the actions, forms, figures and proprieties of all Creatures; for if none but Man had reaſon, and none but Animals ſenſe, the World could not be ſo exact, and ſo well in order as it is: but Nature is wiſer then Man with all his Arts, for theſe are onely produced through the variety of Natures actions, and diſputes through the ſuperfluous varieties of Mans follies or ignorances, not knowing Natures powerful life and knowledg: But I wonder, *Madam*, your *Author* ſays in this place, *That Reaſon is not born with Man*, when as in another place, * he ſays, *That every man brought Philoſophy, that is Natural reaſon with him into the World*; Which how it agree, I will leave to others to judg, and to him to reconcile it, remaining in the mean time,

* In his *Elements of Philoſophy, part.* 1. *c.* 1. *art.* 1.

MADAM,

Your Conſtant Friend
and Faithful Servant.

XII.

MADAM,

TWo ſorts of motions, I find your *Author* * doth attribute to Animals, *viz. Vital and Animal, the Vital motions*, ſays he, *are begun in Generation, and continued without Interruption through their whole life, and thoſe are the Courſe of the Blood, the Pulſe, the Breathing, Conviction, Nutrition, Excretion*, &c. *to which*

* *Leviathan, part.* 1. *c.* 6.

which motions there needs no help of Imaginations; But the animal Motions, otherwiſe called voluntary Motions, are to go, to ſpeak, to move any of our limbs, in ſuch manner as is firſt fancied in our minds: And becauſe going, ſpeaking, and the like voluntary motions, depend always upon a precedent thought of whither, which way, and what, it is evident, that the Imagination is the firſt Internal beginning of all voluntary Motion. Thus far your *Author*. Whereof in ſhort I give you my opinion, firſt concerning Vital Motions, that it appears improbable if not impoſsible to me, that Generation ſhould be the cauſe and beginning of Life, becauſe Life muſt of neceſsity be the cauſe of Generation, life being the Generator of all things, for without life motion could not be, and without motion not any thing could be begun, increaſed, perfected, or diſſolved. Next, that Imagination is not neceſſary to Vital Motions, it is probable it may not, but yet there is required Knowledg, which I name Reaſon; for if there were not Knowledg in all Generations or Productions, there could not any diſtinct Creature be made or produced, for then all Generations would be confuſedly mixt, neither would there be any diſtinct kinds or ſorts of Creatures, nor no different Faculties, Proprieties, and the like. Thirdly, concerning *Animal Motions*, which your *Author* names *Voluntary Motions*, *as to go, to ſpeak, to move any of our limbs, in ſuch manner as is firſt fancied in our minds, and that they depend upon a precedent thought of whither, which way, and what, and that Imagination is the firſt Internal beginning of them*; I think, by your *Authors* leave, it doth imply a contradiction, to call them Voluntary Motions, and yet to ſay they are cauſed and depend upon our

Imagination; for if the Imagination draws them this way, or that way, how can they be voluntary motions, being in a manner forced and neceſsitated to move according to Fancy or Imagination? But when he goes on in the ſame place and treats of Endeavour, Appetite, Deſire, Hunger, Thirſt, Averſion, Love, Hate, and the like, he derives one from the other, and treats well as a Moral Philoſopher; but whether it be according to the truth or probability of Natural Philoſophy, I will leave to others to judge, for in my opinion Paſsions and Appetites are very different, Appetites being made by the motions of the ſenſitive Life, and Paſsions, as alſo Imagination, Memory, &c. by the motions of the rational Life, which is the cauſe that Appetites belong more to the actions of the Body then the Mind: 'Tis true, the Senſitive and Rational ſelf-moving matter doth ſo much reſemble each other in their actions, as it is difficult to diſtinguiſh them. But having treated hereof at large in my other Philoſophical Work, to cut off repetitions, I will refer you to that, and deſire you to compare our opinions together: But certainly there is ſo much variety in one and the ſame ſort of Paſsions, and ſo of Appetites, as it cannot be eaſily expreſs'd. To conclude, I do not perceive that your *Author* tells or expreſſes what the cauſe is of ſuch or ſuch actions, onely he mentions their dependance, which is, as if a man ſhould converſe with a Nobleman's Friend or Servant, and not know the Lord himſelf. But leaving him for this time, it is ſufficient to me, that I know your Ladyſhip, and your Ladyſhip knows me, that I am,

MADAM,

Your faithful Friend, and humble Servant.

MA-

XIII.

MADAM,

HAving obey'd your Commands in giving you my opinion of the Firſt Part of the Book of that famous and learned *Author* you ſent me, I would go on; but ſeeing he treats in his following Parts of the Politicks, I was forced to ſtay my Pen, becauſe of theſe following Reaſons. Firſt, That a Woman is not imployed in State Affairs, unleſs an abſolute Queen. Next, That to ſtudy the Politicks, is but loſs of Time, unleſs a man were ſure to be a Favourite to an abſolute Prince. Thirdly, That it is but a deceiving Profeſsion, and requires more Craft then Wiſdom. All which conſidered, I did not read that part of your *Author*: But as for *his Natural Philoſophy*, I will ſend you my opinion ſo far as I underſtand it: For what belongs to Art, as to Geometry, being no Scholar, I ſhall not trouble my ſelf withal. And ſo I'l take my leave of you, when I have in two or three words anſwered the Queſtion you ſent me laſt, which was, Whether Nature be the Art of God, Man the Art of Nature, and a Politick Government the Art of Man? To which I anſwer, 'Tis probable it may be ſo; onely I add this, That Nature doth not rule God, nor Man Nature, nor Politick Government Man; for the Effect cannot rule the Cauſe, but the Cauſe doth rule the Effect: Wherefore if men do not naturally agree, Art cannot make unity amongſt them, or aſſociate them into one Politick Body and ſo

rule

rule them; But man thinks he governs, when as it is Nature that doth it, for as nature doth unite or divide parts regularly or irregularly, and moves the ſeveral minds of men and the ſeveral parts of mens bodies, ſo war is made or peace kept: Thus it is not the artificial form that governs men in a Politick Government, but a natural power, for though natural motion can make artificial things, yet artificial things cannot make natural power; and we might as well ſay, nature is governed by the art of nature, as to ſay man is ruled by the art and *invention* of men. The truth is, Man rules an *artificial* Government, and not the Government *Man*, juſt like as a Watch-maker rules his Watch, and not the Watch the Watch-maker. And thus I conclude and reſt,

MADAM,

Your faithful Friend

and Servant.

XIV.

MADAM,

CONcerning the other Book of that learned Author *Hobbs* you ſent me, called *Elements of Philoſophy*, I ſhall likewiſe according to your deſire, give you my judgment and opinion of it as I have done of the former, not that I intend to prejudice him any ways thereby, but onely to mark thoſe places wherein

I ſeem to diſſent from his opinions, which liberty, I hope, he will not deny me; And in order to this, I have read over the firſt Chapter of the mentioned Book, treating of Philoſophy in General, wherein amongſt the reſt, diſcourſing of the Utility of Natural Philoſophy, and relating the commodities and benefits which proceed from ſo many arts and ſciences, he is pleaſed to ſay, * that they are *injoyed almoſt by all people of* Europe, Aſia, *and ſome of* Africa, *onely the Americans, and thoſe that live neer the Poles do want them: But why,* ſays he, *have they ſharper wits then theſe? Have not all men one kind of ſoul, and the ſame faculties of mind?* To which, give me leave, *Madam*, to add, That my opinion is, that there is a difference between the Divine and the Natural ſoul of man, and though the natural mind or ſoul is of one kind, yet being made of rational matter, it is divideable and compoſeable; by which diviſion and compoſition, men may have more or leſs wit, or quicker and ſlower wit; the like for Judgments, Imaginations, Fancies, Opinions, *&c.* For were the natural rational mind individeable, all men would have the like degree of wit or underſtanding, all men would be Philoſophers or fools, which by reaſon they are not, it proves the natural rational mind is divideable and compoſeable, making variations of its own ſeveral parts by ſelf-motion; for it is not the ſeveral outward objects, or forreign inſtructions, that make the variety of the mind; neither is wit or ingenuity alike in all men; for ſome are natural Poets, Philoſophers, and the like, without learning, and ſome are far more ingenious then others, although their breeding is obſcure and mean; Neither will learning make all men Scholars, for ſome will continue Dunces

* *Art.* 7.

all their life time; Neither doth much experience make all men wiſe, for ſome are not any ways advanced in their wiſdom by much and long experiences; And as for Poetry, it is according to the common Proverb, a *Poet is born, not made*; Indeed learning doth rather hurt Fancy, for great Scholars are not always good Poets, nor all States-men Natural Philoſophers, nor all Experienced Men Wiſe Men, nor all Judges Juſt, nor all Divines Pious, nor all Pleaders or Preachers Eloquent, nor all Moral Philoſophers Vertuous; But all this is occaſioned by the various Motions of the rational ſelf-moving matter, which is the Natural Mind. And thus much for the preſent of the difference of wits and faculties of the mind; I add no more, but reſt,

MADAM,

Your faithful Friend,

and Servant.

XV.

MADAM,

MY Diſcourſe for the preſent ſhall be of *Infinite*, and the queſtion ſhall be firſt *Whether ſeveral Finite parts, how many ſoever there be, can make an Infinite.* Your Author ſays, * that *ſeveral Finite parts when they are all put together make a whole Finite*; which, if his meaning be of a certain determinate number, how big ſoever, of finite parts, I do willingly grant, for all what

* *Elem. of Philoſ. c. 7. 12.*

what is determinate and limited, is not Infinite but Finite; neither is there any ſuch thing, as Whole or All in Infinite; but if his meaning be, that no Infinite can be made of finite parts, though infinite in number, I deny it; Next he ſays *there can be no ſuch thing as One in Infinite, becauſe No thing can be ſaid One, except there be another to compare it withal*; which in my opinion doth not follow, for there is but One God, who is Infinite, and hath none other to be compared withal, and ſo there may be but one Onely Infinite in Nature, which is Matter. But when he ſays, *there cannot be an Infinite and Eternal Diviſion*, is very true, *viz.* in this ſenſe, that one ſingle part cannot be actually infinitely divided; for the Compoſitions hinder the Diviſions in Nature, and the Diviſions the Compoſitions, ſo that Nature, being Matter, cannot be compoſed ſo, as not to have parts, nor divided ſo, as that her parts ſhould not be compoſed, but there are nevertheleſs infinite divided parts *in* Nature; and in this ſenſe there may alſo be infinite diviſions, as I have declared in my Book of Philoſophy. And thus there are Infinite diviſions of Infinite parts in Nature, but not Infinite actual diviſions of one ſingle part; But though Infinite is without end, yet my diſcourſe of it ſhall be but ſhort and end here, though not my affection, which ſhall laſt and continue with the life of *P. 1. c. 8.*

MADAM,

Your Faithful Friend

and Humble Servant.

MA-

XVI.

MADAM,

* *Elem. of Philoſ c.8. art.2.*

AN *Accident*, ſays your *Author*, * *is nothing elſe, but the manner of our Conception of body*, or *that Faculty of any body, by which it works in us a Conception of it ſelf*; To which I willingly conſent; but yet I ſay, that theſe qualities cannot be ſeparated from the body, for as impoſsible it is that the eſſence of Nature ſhould be ſeparable from Nature, as impoſsible is it that the various modes or alterations, either of Figures or Motions, ſhould be ſeparable from matter or body; Wherefore when he goes on, and ſays, *An accident is not a body, but in a body, yet not ſo, as if any thing were contained therein, as if for example, redneſs were in blood in the ſame manner as blood is in a bloody cloth; but as magnitude is in that which is great, reſt in that which reſteth, motion in that which is moved*; I anſwer, that in my opinion, not any thing in Nature can be without a body, and that redneſs is as well in blood, as blood is in a bloody cloth, or any other colour in any thing elſe; for there is no colour without a body, but every colour hath as well a body as any thing elſe, and if Colour be a ſeparable accident, I would fain know, how it can be ſeparated from a ſubject, being bodileſs, for that which is no body is nothing, and nothing cannot be taken away from any thing; Wherefore as for natural Colour it cannot be taken away from any creature, without the parts of its ſubſtance or body; and as for artificial Colours,

Art. 3.

lours, when they are taken away, it is a ſeparation of two bodies, which joyned together; and if Colour, or Hardneſs, or Softneſs do change, it is nothing elſe but an alteration of motions and not an annihilation, for all changes and alterations remain in the power of Corporeal motions, as I have ſaid in other places; for we might as well ſay, life doth not remain in nature, when a body turns from an animal to ſome other figure, as believe that thoſe, they name accidents, do not remain in Corporeal Motions; Wherefore I am not of your *Authors* mind, when he ſays, * that *when a White thing is made black, the whiteneſs periſhes*; for it cannot periſh, although it is altered from white to black, being in the power of the ſame matter, to turn it again from black to white, ſo as it may make infinite Repetitions of the ſame thing; but by reaſon nature takes delight in variety, ſhe ſeldom uſes ſuch repetitions; nevertheleſs that doth not take away the Power of ſelf-moving matter, for it doth not, and *it cannot*, are two ſeveral things, and the latter doth not neceſſarily follow upon the former; Wherefore not any, the leaſt thing, can periſh in Nature, for if this were poſsible, the whole body of nature might periſh alſo, for if ſo many Figures and Creatures ſhould be annihilated and periſh without any ſupply or new Creation, Nature would grow leſs, and at laſt become nothing; beſides it is as difficult for Nature to turn ſomething into nothing, as to Create ſomething out of nothing; Wherefore as there is no annihilation or periſhing in Nature, ſo there is neither any new Creation in Nature. But your *Author* makes a difference between bodies and accidents, ſaying, *that bodies are things and not Generated: but accidents are Generated and not things*

* Art. 28.

things. Truly, *Madam,* theſe accidents ſeem to me to be like *Van Helmont's* Lights, Gaſes, Blazes and Ideas; and Dr *More's* Immaterial Subſtances or Dæmons, onely in this Dr *More* hath the better, that his Immaterial Subſtances, are beings, which ſubſiſt of themſelves, whereas accidents do not, but their exiſtence is in other bodies; But what they call Accidents, are in my opinion nothing elſe but Corporeal Motions, and if theſe accidents be generated, they muſt needs be bodies, for how nothing can be Generated in nature, is
Art. 2. not conceivable, and yet your *Author* denies, [a] that *Accidents are ſomething, namely ſome part of a natural thing*; But as for Generations, they are onely various actions of ſelf-moving matter, or a variety of Corporeal Motions, and ſo are all Accidents whatſoever, ſo that there is not any thing in nature, that can be made new, or deſtroyed, for whatſoever was and ſhall be, is in nature, though not always in act, yet in power, as in the nature and power of Corporeal motions, which is ſelf-moving matter, And as there is no new Generation of Accidents, ſo there is neither a new Generation of Mo-
Art. 21. tions; wherefore when your *Author* ſays, [b] *That, when the hand, being moved, moveth the pen, the motion doth not go out of the hand into the pen, for ſo the writing might be continued, though the hand ſtood ſtill, but a new motion is generated in the pen, and is the pens motion:* I am of his opinion, that the motion doth not go out of the hand into the pen, and that the motion of the pen, is the pens own motion; but I deny, that after holding the hand a little while ſtill, and beginning to write again, a new motion of the pen is generated; for it is onely a repetition, and not a new generation, for the Hand, Pen

and

and Ink, repeat but the ſame motion or action of writing: Beſides, Generation is made by Connexion or Conjunction of parts, moving by conſent to ſuch or ſuch Figures, but the motion of the Hand or the Pen is always one and the ſame; wherefore it is but the variation and repetition in and of the ſame motion of the Hand, or Pen, which may be continued in that manner infinitely, juſt as the ſame Corporeal Motions can make infinite variations and repetitions of one and the ſame Figure, repeating it as oft as they pleaſe, as alſo making Copy of Copy; And although I do not deny, but there are Generations in Nature, yet not annihilations or periſhings, for if any one motion or figure ſhould periſh, the matter muſt periſh alſo; and if any one part of matter can periſh, all the matter in nature may periſh alſo; and if there can any new thing be made or created in nature, which hath not been before, there may alſo be a new Nature, and ſo by periſhings and new Creations, this World would not have continued an age; But ſurely whatſoever is in Nature, hath been exiſtent always. Wherefore to conclude, it is not the generation and periſhing of an Accident that makes its ſubject to be changed, but the production and alteration of the Form, makes it ſaid to be generated or deſtroyed, for matter will change its motions and figures without periſhing or annihilating; and whether there were words or not, there would be ſuch cauſes and effects; But having not the art of Logick to diſpute with artificial words, nor the art of Geometry to demonſtrate my opinions by Mathematical Figures, I fear they will not be ſo well

well received by the Learned; However, I leave them to any mans unprejudiced Reaſon and Judgment, and devote my ſelf to your ſervice, as becomes,

MADAM,

Your Ladiſhips

humble and faithful Servant.

XVII.

MADAM,

Part. 2. c. 8. a. 5. YOur *Author* concerning Place and Magnitude ſays, that *Place is nothing out of the mind, nor Magnitude any thing within it; for Place is a meer Phantaſme of a body of ſuch quantity and figure, and Magnitude a peculiar accident of the body*; But this doth not well agree with my reaſon, for I believe that Place, Magnitude and Body are but one thing, and that Place is as true an extenſion as Magnitude, and not a feigned one; Neither am I of his opinion, *that Place is Immoveable*, but that place moves, according as the body moveth, for not any body wants place, becauſe place and body is but one thing, and whereſoever is body, there is alſo place, and whereſoever is place, there is body, as being one and the ſame; Wherefore *Motion cannot be a relinquiſhing of one place and acquiring another*, for there is no ſuch thing as place different from body, but what is called change of place, is nothing but

Art. 10.

but change of corporeal motions; for, ſay an houſe ſtands in ſuch a place, if the houſe be gone, the place is gone alſo, as being impoſsible that the place of the houſe ſhould remain, when the houſe is taken away; like as a man when he is gone out of his chamber, his place is gone too; 'Tis true, if the ground or foundation do yet remain, one may ſay, there ſtood ſuch an houſe heretofore, but yet the place of the houſe is not there really at that preſent, unleſs the ſame houſe be built up again as it was before, and then it hath its place as before; Nevertheleſs the houſe being not there, it cannot be ſaid that either place or houſe are annihilated, *viz*, when the materials are diſſolved, no not when transformed into millions of ſeveral other figures, for the houſe remains *ſtill in* the power of all thoſe ſeveral parts of matter; and as for *ſpace*, it is onely a diſtance betwixt ſome parts or bodies; But an *Empty place* ſignifies to my opinion Nothing, for if place and body are one and the ſame, *and empty is as much as nothing, then certainly* theſe two words cannot conſiſt together, but are deſtructive to one another. Concerning, that your *Author* ſays, *Two bodies cannot be together in the ſame place, nor* Art. 8. *one body in two places at the ſame time*, is very true, for there are no more places then bodies, nor more bodies then places, and this is to be underſtood as well of the groſſer, as the pureſt parts of nature, of the mind as well as of the body, of the rational and ſenſitive animate matter as well as of the inanimate, for there is no matter, how pure and ſubtil ſoever, but is imbodied, and all that hath body hath place. Likewiſe I am of his opinion, *That one body hath always one and the ſame* Art. 9 *magnitude*; for, in my opinion, magnitude, place and

body do not differ, and as place, ſo magnitude can never be ſeparated from body. But when he ſpeaks of *Reſt*, I cannot believe there is any ſuch thing truly in Nature, for it is impoſsible to prove, that any thing is without Motion, either conſiſtent, or compoſing, or diſſolving, or transforming motions, or the like, although not altogether perceptible by our ſenſes, for all the Matter is either moving or moved, and although the moved parts are not capable to receive the nature of ſelf-motion from the ſelf-moving parts, yet theſe ſelf-moving parts, being joyned and mixt with all other parts of the moved matter, do always move the ſame; for the Moved or Inanimate part of Matter, although it is a Part of it ſelf, yet it is ſo intermixt with the ſelf-moving Animate Matter, as they make but one Body; and though ſome parts of the Inanimate may be as pure as the Senſitive Animate Matter, yet they are never ſo ſubtil as to be ſelf-moving; Wherefore the Senſitive moves in the Inanimate, and the Rational in the Senſitive, but often the Rational moves in it ſelf. And, although there is no reſt in nature, nevertheleſs Matter could have been without Motion, when as it is impoſsible that Matter could be without place or magnitude, no more then Variety can be without motion; And thus much at this preſent: I conclude, and reſt,

MADAM,

Your Faithful Friend

and Servant.

XVIII.

MADAM,

PAſsing by thoſe Chapters of your *Authors*, that treat of *Power and Act, Identy and Difference, Analogiſme, Angle and Figure, Figures deficient, dimenſion of Circles*, and ſeveral others, moſt of which belong to art, as to Geometry, and the like; I am come to that wherein he diſcourſes of *Senſe* and *Animal Motion*, ſaying, *That ſome Natural bodies have in themſelves the patterns almoſt of all things, and others of none at all*; Whereof my opinion is, that the ſenſitive and rational parts of Matter are the living and knowing parts of Nature, and no part of nature can challenge them onely to it ſelf, nor no creature can be ſure, that ſenſe is onely *in Animal-kind*, and reaſon *in Man-kind*; for can any one think or believe that Nature is ignorant and dead in all her other parts beſides Animals? Truly this is a very unreaſonable opinion; for no man, as wiſe as he thinks himſelf, nay were all Man-kind joyned into one body, yet they are not able to know it, unleſs there were no variety of parts in nature, but onely one whole and individeable body, for other Creatures may know and perceive as much as Animals, although they have not the ſame Senſitive Organs, nor the ſame manner or way of Perception. Next your *Author* ſays, *The cauſe of Senſe or Perception conſiſts herein, that the firſt organ of ſenſe is touched and preſſed; For when the uttermoſt part of the organ is preſſed, it no ſooner yields;* C. 25. a. 1.

Art. 2.

but

but the part next within it is preſſed alſo, and in this manner the preſſure or motion is propagated through all the parts of the organ to the innermoſt. And thus alſo the preſſure of the uttermoſt part proceeds from the preſſure of ſome more remote body, and ſo continually, till we come to that, from which, as from its fountain, we derive the Phantaſme or Idea, that is made in us by our ſenſe: And this, whatſoever it be, is that we commonly call the object; Senſe therefore is ſome Internal motion in the Sentient, Generated by ſome Internal motion of the Parts of the object, and propagated through all the media to the innermoſt part of the organ. Moreover there being a reſiſtance or reaction in the organ, by reaſon of its internal motion againſt the motion propagated from the object, there is alſo an endeavour in the organ oppoſite to the endeavour proceeding from the object, and when that endeavour inwards is the laſt action in the act of ſenſe, then from the reaction a Phantaſme or Idea has its being. This is your *Authors* opinion, which if it were ſo, perception could not be effected ſo ſuddenly, nay I think the ſentient by ſo many preſſures in ſo many perceptions, would at laſt be preſſed to death, beſides the organs would take a great deal of hurt, nay totally be removed out of their places, ſo as the eye would in time be preſt into the centre of the brain; And if there were any Reſiſtance, Reaction or Indeavour in the organ, oppoſite to the Endeavour of the object, there would, in my opinion, be always a war between the animal ſenſes and the objects, the endeavour of the objects preſsing one way, and the ſenſes preſsing the other way, and if equal in their ſtrengths, they would make a ſtop, and the ſenſitive organs would be very much pained; Truly, *Madam*, in

my

my opinion, it would be like that Cuſtom which formerly hath been uſed at *Newcaſtle*, when a man was married, the gueſts divided themſelves, behind and before the Bridegroom, the one party driving him back, the other forwards, ſo that one time a Bridegroom was killed in this faſhion; But certainly Nature hath a more quick and eaſie way of giving intelligence and knowledg to her Creatures, and doth not uſe ſuch conſtraint and force in her actions; Neither is ſenſe or ſenſitive perception a meer Phantaſme or Idea, but a Corporeal action of the ſenſitive and rational matter, and according to the variation of the objects or patterns, and the ſenſitive and rational motions, the perception alſo is various, produced not by external preſſure, but by internal ſelf-motion, as I have declared heretofore; and to prove, that the ſenſitive and rational corporeal motions are the onely cauſe of perception; I ſay, if thoſe motions in an animal move in another way; and not to ſuch perceptions, then that animal can neither hear, ſee, taſte, ſmell, nor touch, although all his ſenſitive organs be perfect, as is evident in a man falling into a ſwoon, where all the time he is in a ſwoon, the preſſure of the objects is made without any effect; Wherefore, as the ſenſitive and rational corporeal motions make all that is in nature, ſo likewiſe they make perception, as being perception it ſelf, for all ſelf-motion is perception, but all perception is not animal perception, or after an animal way; and therefore ſenſe cannot decay nor die, but what is called a decay or death, is nothing elſe but a change or alteration of thoſe Motions. But you will ſay, *Madam*, it may be, that one body, as an object, leaves the print of its figure, in the next

adjoyning body, until it comes to the organ of ſenſe, I anſwer that then ſoft bodies onely muſt be preſſed, and the object muſt be ſo hard as to make a print, and as for rare parts of matter, they are not able to retain a print without ſelf-motion; Wherefore it is not probable that the parts of air ſhould receive a print, and print the ſame again upon the adjoyning part, until the laſt part of the air print it upon the eye; and that the exterior parts of the organ ſhould print upon the interior, till it come to the centre of the Brain, without ſelf-motion. Wherefore in my opinion, Perception is not cauſed either by the printing of objects, nor by preſſures, for preſſures would make a general ſtop of all natural motions, eſpecially if there were any reaction or reſiſtence of ſenſe; but according to my reaſon, the ſenſitive and rational corporeal motions in one body, pattern out the Figure of another body, as of an exterior object, which may be done eaſily without any preſſure or reaction; I will not ſay, that there is no preſſure or reaction in Nature, but preſſure and reaction doth not make perception, for the ſenſitive and rational parts of matter make all perception and variety of motion, being the moſt ſubtil parts of Nature, as ſelf-moving, as alſo divideable, and compoſeable, and alterable in their figurative motions, for this Perceptive matter can change its ſubſtance into any figure whatſoever in nature, as being not bound to one conſtant figure. But having treated hereof before, and being to ſay more of it hereafter, this ſhall ſuffice for the preſent, remaining always,

MADAM,

Your conſtant Friend,
and faithful Servant.

MA-

XIX.

MADAM,

TO diſcourſe of the World and Stars, is more then I am able to do, wanting the art of Aſtronomy and Geometry; wherefore paſsing by that Chapter of your Author, I am come to that * wherein he treats of Light, Heat and Colours; and to give you my opinion of Light, I ſay, it is not the light of the Sun, that makes an Animal ſee, for we can ſee inwardly in Dreams without the Suns light, but it is the ſenſitive and rational Motions in the Eye and Brain that make ſuch a figure as *Light*; For if Light did preſs upon the Eye, according to your *Authors* opinion, it might put the Eye into as much pain as Fire doth, when it ſticks its points into our skin or fleſh. The ſame may be ſaid of Colours, for the ſenſitive motions make ſuch a figure, which is ſuch a Colour, and ſuch a Figure, which is ſuch a Colour; Wherefore Light, Heat and Colour, are not bare and bodileſs qualities, but ſuch figures made by corporeal ſelf-motions, and are as well real and corporeal objects as other figures are; and when theſe figures change or alter, it is onely that their motions alter, which may alter and change heat into cold, and light into darkneſs, and black colour into white. But by reaſon the motions of the Sun are ſo conſtant, as the motions of any other kind of Creatures, it is no more ſubject to be altered then all the World, unleſs Nature did it by the command of God; for though the Parts

* *Ch.* 27.

of

of ſelf-moving Matter be alterable, yet all are not altered; and this is the reaſon, that the figure of Light in our eye and brain is altered, as well as it is alterable, but not the real figure of the Sun, neither doth the Sun enter our eyes and as the Light of the Sun is made or patterned in the eye, ſo is the light of Glow-worms-tails, and Cats-eyes that ſhine in the dark, made not by the Sun's, but their own motions in their own parts; The like when we dream of Light, the ſenſitive corporeal motions working inwardly, make the figure of light on the inſide of the eye, as they did pattern out the figure of light on the out ſide of the eye when awake, and the objects before them; for the ſenſitive motions of the eye pattern out the figure of the object in the eye, and the rational motion make the ſame figure in their own ſubſtance. But there is ſome difference between thoſe figures that perceive light, and thoſe that are light themſelves; for when we ſleep, there is made the figure of light, but not from a copy; but when the eye ſeeth light, that figure is made from a copy of the real figure of the Sun; but thoſe lights which are inherent, as in Glow-worms-tails, are original lights, in which is as much difference as between a Man and his Picture; and as for the ſwiftneſs of the Motions of light, and the violence of the Motions of fire, it is very probable they are ſo, but they are a certain particular kind or ſort of ſwift and violent motions; neither will all ſorts of ſwift and violent motions make fire or light, as for example the ſwift and violent Circular motion of a Whirlewind neither makes light nor fire; Neither is all fire light, nor all light fire, for there is a ſort of dead fire, as in Spices, Spirits, Oyles, and the like; and ſeveral ſorts of lights, which are not hot, as

the

the light which is made in Dreams, as alſo the inherent lights in Glow-worms, Cats-eyes, Fiſh-bones, and the like; all which ſeveral fires and lights are made by the ſelf-moving matter and motions diſtinguiſhable by their figures, for thoſe Motions make ſuch a figure for the Suns light, ſuch a figure for Glow-worms light, ſuch a figure for Cats-eyes light, and ſo ſome alteration in every ſort of light; The ſame for Fire, onely Fire-light is a mixt figure, as partly of the figure of Fire, and partly of the figure of Light: Alſo Colours are made after the like manner, *viz.* ſo many ſeveral Colours, ſo many ſeveral Figures; and as theſe Figures are leſs or more different, ſo are the Colours.

Thus, *Madam*, whoſoever will ſtudy Nature, muſt conſider the Figures of every Creature, as well as their Motions, and muſt not make abſtractions of Motion and Figure from Matter, nor of Matter from Motion and Figure, for they are inſeparable, as being but one thing, *viz.* *Corporeal Figurative Motions*; and whoſoever conceives any of them as abſtract, will, in my opinion, very much erre; but men are apt to make more difficulties and enforcements in nature then nature ever knew. But to return to Light: There is no better argument to prove that all objects of ſight are figured in the Eye, by the ſenſitive, voluntary or ſelf-motions, without the preſſure of objects, but that not onely the preſſure of light would hurt the tender Eye, but that the eye doth not ſee all objects according to their Magnitude, but ſometimes bigger, ſometimes leſs: as for example, when the eye looks through a ſmall paſſage, as a Proſpective-glaſs, by reaſon of the difficulty of ſeeing a body through a ſmall hole, and the double figure of the glaſs

being convex and concave, the corporeal motions uſe more force, by which the object is enlarged, like as a ſpark of fire by force is dilated into a great fire, and a drop of water by blowing into a bubble; ſo the corporeal motions do double and treble their ſtrength, making the Image of the object exceeding large in the eye; for though the eye be contracted, yet the Image in the eye is enlarged to a great extenſion; for the ſenſitive and rational matter is extremely ſubtil, by reaſon it is extreamly pure, by which it hath more means and ways of magnifying then the Perſpective-glaſs. But I intend to write more of this ſubject in my next, and ſo I break off here, reſting,

MADAM,

Your Faithful Friend

and Servant.

XX.

MADAM,

SOme perhaps will queſtion the truth or probability of my ſaying, that Light is a Body, objecting that if light were a body, when the Sun is abſent or retires under our Horizon, its light would leave an empty place, or if there were no empty place but all full, the light of the Sun at its return would not have room to diſplay it ſelf, eſpecially in ſo great a compaſs as it doth, for two bodies cannot be in one place at one time. *I anſwer,*

all

all bodies carry their places along with them, for body and place go together and are inſeparable, and when the light of the Sun is gone, darkneſs ſucceeds, and when darkneſs is gone, light ſucceeds, ſo that it is with light and darkneſs as with all Creatures elſe; For you cannot believe, that if the whole World were removed, there would be a place of the world left, for there cannot be an empty nothing, no more then there can be an empty ſomething; but if the world were annihilated, the place would be annihilated too, place and body being one and the ſame thing; and therefore in my opinion, there be no more places then there are bodies, nor no more bodies then there are places.

Secondly, They will think it abſurd that I ſay, the eye can ſee without light; but in my opinion it ſeems not abſurd, but very rational, for we may ſee in dreams, and ſome do ſee in the dark, not in their fancy or imagination, but really; and as for dreams, the ſenſitive corporeal motions make a light on the inſide of the organ of ſight really, as I have declared in my former Letter. But that we do not ſee ordinarily without exterior Light, the reaſon is, that the ſenſitive Motions cannot find the outward objects to pattern out without exterior light, but all perception doth not proceed from light, for all other perception beſides animal ſight requires not light. Neither in my opinion, doth the Perception of ſight in all Creatures but Animals, but yet Animals do often ſee in the dark, and in ſleep: I will not ſay but that the animate matter which by ſelf-motion doth make the Perception of light with other perceptive Figures, and ſo animal perceptive light may be the preſenter or ground perceptive figure of ſight; yet the ſenſitive corporeal

motions

motions can make other figures without the help of light, and ſuch as light did never preſent: But when the eye patterns out an exterior object preſented by light, it patterns alſo out the object of light; for the ſenſitive motions can make many figures by one act, not onely in ſeveral organs, but in one organ; as for example, there is preſented to ſight a piece of Imbroydery, wherein is ſilk, ſilver and gold upon Sattin in ſeveral forms or figures, as ſeveral flowers, the ſenſitive motions ſtreight by one and the ſame act, pattern out all thoſe ſeveral figures of flowers, as alſo the figures of Silk, Silver, Gold and Sattin, without any preſſure of theſe objects, or motions in the medium, for if they all ſhould preſs, the eye would no more ſee the exterior objects, then the noſe, being ſtopt, could ſmell a preſented perfume;

Thirdly, They may ask me, if ſight be made in the eye, and proceeds not from the outward object, what is the reaſon that we do not ſee inwardly, but outwardly as from us? I anſwer, when we ſee objects outwardly, as from us, then the ſenſitive motions work on the outſide of the organ, which organ being outwardly convex, cauſes us to ſee outwardly, as from us, but in dreams we ſee inwardly; alſo the ſenſitive motions do pattern out the diſtance together with the object: But you will ſay, the body of the diſtance, as the air, cannot be perceived, and yet we can perceive the diſtance; I anſwer, you could not perceive the diſtance, but by ſuch or ſuch an object as is ſubject to your ſight; for you do not ſee the diſtance more then the air, or the like rare body, that is between groſſer objects; for if there were no ſtars, nor planets, nor clouds, nor earth, nor water, but onely air, yon would not ſee any ſpace or diſtance;

diſtance; but light being a more viſible body then air, you might figure the body of air by light, but ſo, as in an extenſive or dilating way; for when the mind or the rational matter conceives any thing that hath not ſuch an exact figure, or is not ſo perceptible by our ſenſes; then the mind uſes art, and makes ſuch figures, which ſtand like to that; as for example, to expreſs infinite to it ſelf, it dilates it parts without alteration, and without limitation or circumference; Likewiſe, when it will conceive a conſtant ſucceſsion of Time, it draws out its parts into the figure of a line; and if eternity, it figures a line without beginning and end: But as for Immaterial, no mind can conceive that, for it cannot put it ſelf into nothing, although it can dilate and rarifie it ſelf to an higher degree, but muſt ſtay within the circle of natural bodies, as I within the circle of your Commands, to expreſs my ſelf,

MADAM,

Your faithful Friend,

and obedient Servant.

XXI.

MADAM,

HEat and Cold, according to your *Authors* opinion, are made by Dilation and Contraction: for ſays he, *When the Motion of the ambient æthereal ſubſtance makes the ſpirits and fluid parts of our bodies tend* C. 28. a. 1.

outwards, we acknowledg heat, but by the indeavour inwards of the ſame ſpirits and humors we feel cold: ſo that to cool is to make the exterior parts of the body endeavour inwards, by a motion contrary to that of calefaction, by which the internal parts are called outwards. He therefore that would know the cauſe of Cold, muſt find by what motion the exterior parts of any body endeavour to retire inwards. But I deſire you to conſider, *Madam*, that there be moiſt Colds, and dry Heats, as well as dry Colds, and moiſt Heats; wherefore all ſorts of Cold are not made by the retyring of parts inwards, which is contraction or attraction; neither are all ſorts of Heat made by parts tending outwards, which is dilation or rarefaction; for a moiſt cold is made by dilation, and a dry heat by contraction, as well as a moiſt heat is made by dilation, and a dry cold by contraction: But your *Author* makes not this difference, but onely a difference between a dilated heat, and a contracted cold; but becauſe a cold wind is made by breath blown thorow pinched or contracted lips, and an hot wind by breath through opened and extended lips; ſhould we judg that all heat and cold muſt be made after one manner or way? The contracted mouth makes Wind as well as the dilated, but yet Wind is not made that way, as heat and cold; for it may be, that onely the air preſſed together makes wind, or it may be that the corporeal motions in the air may change air into wind, as they change water into vapour, and vapour into air; or it may be ſomething elſe that is inviſible and rare, as air; and there may be ſeveral ſorts of wind, air, heat, cold, as of all other Creatures, more then man is capable to know. As for your *Authors* opinion concerning the congealing of Water, and how

Ice is made, I will not contradict it, onely I think nature hath an eaſier way to effect it, then he deſcribes; Wherefore my opinion is, that it is done by altering motions; as for example, the corporeal motions making the figure of water by dilation in a Circle figure, onely alter from ſuch a dilating circular figure into a contracted ſquare, which is Ice, or into ſuch a contracted triangle, as is ſnow: And thus water and vapour may be changed with eaſe, without any forcing, preſſing, raking, or the like. The ſame may be ſaid of hard and bent bodies; and of reſtitution, as alſo of air, thunder and lightning, which are all done by an eaſie change of motion, and changing into ſuch or ſuch a figure is not the motion of Generation, which is to build a new houſe with old materials, but onely a Transformation; I ſay a new houſe with old materials; not that I mean there is any new Creation in nature, of any thing that was not before in nature; for nature is not God, to make new beings out of nothing, but any thing may be called new, when it is altered from one figure into another. I add no more at this time, but reſt,

MADAM,

Your faithful Friend

and Servant.

MA-

XXII.

MADAM,

THe Generation of ſound, according to your worthy *Authors* opinion, is as follows: *As Viſion,* * ſays he, *ſo hearing is Generated by the medium, but but not in the ſame manner; for ſight is from preſſure, that is, from an endeavour, in which there is no perceptible progreſſion of any of the parts of the medium, but one part urging or thruſting on another, propagateth that action ſucceſſively to any diſtance whatſoever; whereas the motion of the medium, by which ſound is made, is a ſtroke; for when we hear, the drum of the Ear, which is the firſt organ of hearing, is ſtrucken, and the drum being ſtricken, the* Pia Mater *is alſo ſhaken, and with it the arteries inſerted into it, by which the action propagated to the heart it-ſelf, by the reaction of the heart a Phantaſme is made which we call Sound.* Thus far your *Author*: To which give me leave to reply, that I fear, if the Ear was bound to hear any loud Muſick, or another ſound a good while, it would ſoundly be beaten, and grow ſore and bruiſed with ſo many ſtrokes; but ſince a pleaſant ſound would be rendred very unpleaſant in this manner, my opinion is, that like as in the Eye, ſo in the Ear the corporeal ſenſitive motions do pattern out as many ſeveral figures, as ſounds are preſented to them; but if theſe motions be irregular, then the figure of the ſound in the ear is not perfect according to the original; for if it be, that the motions are tyred with figuring, or the object of ſound be

* Lib. 29. c. 1.

be too far *diſtant* from the ſenſitive organ; then they move *ſlowly* and weakly, not that they are tyred or weak in ſtrength, but with working and repeating one and the ſame object, and ſo through love to variety, change from working regularly to move irregularly, ſo as not to pattern outward objects as they ought, and then there are no ſuch patterns made at all, which we call to be deaf; and ſometimes the ſenſitive motions do not ſo readily perceive a ſoft ſound near, as a ſtronger farther off. But to prove it is not the outward object of ſound with its ſtriking or preſsing motion, nor the medium, that cauſes this perception of ſenſe, if there be a great ſolid body, as a wall, or any other partition betwixt two rooms, parting the object and the ſenſitive organ, ſo, as the ſound is not able to preſs it, nevertheleſs the perception will be made; And as for pipes to convey ſounds, the perception is more fixt and perfecter in united then in dilated or extended bodies, and then the ſenſitive motions can make perfecter patterns; for the ſtronger the objects are, the more perfect are the figures and patterns of the objects, and the more perfect is the perception. But when the ſound is quite out of the ear, then the ſenſitive motions have altered the patterning of ſuch figures to ſome other action; and when the ſound fadeth by degrees, then the figure or pattern alters by degrees; but for the moſt part the ſenſitive corporeal motions alter according as the objects are preſented, or the perception patterns out. Neither do they uſually make figures of outward objects, if not perceived by the ſenſes, unleſs through Irregularities as in Mad men, which ſee ſuch and ſuch things, when as theſe things are not neer, and then the ſenſitive motions work by rote, or after

their own voluntary invention. As for Reflexion, it is a double perception, and ſo a double figure of one object; like as many pictures of one man, where ſome are more perfect then others, for a copy of a copy is not ſo perfect as a copy of an original. But the recoyling of ſound is, that the ſenſitive motions in the ear begin a new pattern, before they diſſolved the former, ſo as there is no perfect alteration or change, from making to diſſolving, but pattern is made upon pattern, which cauſes a confuſion of figures, the one being neither perfectly finiſhed, nor the other perfectly made. But it is to be obſerved, that not always the ſenſitive motions in the organs take their pattern from the original, but from copies; as for example, the ſenſitive motions in the eye, pattern out the figure of an eye in a glaſs, and ſo do not take a pattern from the original it ſelf, but by an other pattern, repreſenting the figure of the eye in a Looking-glaſs; The ſame doth the Ear, by patterning out Ecchoes, which is but a pattern of a pattern; But when as a man hears himſelf ſpeak or make a ſound, then the corporeal ſenſitive motions in the Ear, pattern out the object or figure made by the motions of the tongue and the throat, which is voice; By which we may obſerve, that there may be many figures made by ſeveral motions from one original; as for example, the figure of a word is made in a mans mouth, then the copy of that figure is made in the ear, then in the brain, and then in the memory, and all this in one Man: Alſo a word being made in a mans mouth, the air takes a copy or many copies thereof; but the Ear patterns them both out, firſt the original coming from the mouth, and then the copy made in the air, which is called an Eccho,

and

and yet not any ſtrikes or touches each others parts, one-ly perceives and patterns out each others figure. Neither are their ſubſtances the ſame, although the figures be alike; for the figure of a man may be carved in wood, then cut in braſs, then in ſtone, and ſo forth, where the figure may be always the ſame, although the ſubſtances which do pattern out the figure are ſeveral, *viz.* Wood, Braſs, Stone, *&c.* and ſo likewiſe may the figure of a ſtone be figured in the fleſhy ſubſtance of the Eye, or the figure of light or colour, and yet the ſubſtance of the Eye remains ſtill the ſame; neither doth the ſubſtantial figure of a ſtone, or tree, patterned out by the ſenſitive corporeal motions, in the fleſh of an animal eye, change from being a vegetable or mineral, to an animal, and if this cannot be done by nature, much leſs by art; for if the figure of an animal be carved in wood or ſtone, it doth not give the wood or ſtone any animal knowledg, nor an *animal* ſubſtance, as fleſh, bones, blood, *&c.* no more doth the patterning or figuring of a Tree give a vegetable knowledg, or the ſubſtance of wood to the eye, for the figure of an outward object doth not alter the ſubſtance that patterns it out or figures it, but the patterning ſubſtance doth pattern out the figure, in it ſelf, or in its own ſubſtance, ſo as the figure which is pattern'd, hath the ſame life and knowledg with the ſubſtance by and in which it is figured or pattern'd, and the inherent motions of the ſame ſubſtance; and according as the ſenſitive and rational ſelf-moving matter moves, ſo figures are made; and thus we ſee, that lives, knowledges, motions and figures are all material, and all Creatures are indued with life, knowledg, motion and figure, but not all alike or after the ſame manner. But

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to conclude this diſcourſe of perception of Sound, the Ear may take the object of ſound afar off, as well as at a near diſtance; not onely if many figures of the ſame ſound be made from that great diſtance, but if the interpoſing parts be not ſo thick, cloſe, or many as to hinder or obſcure the object from the animal Perception in the ſenſitive organ; for if a man lays his Ear near to the Ground, the Ear may hear at a far diſtance, as well as the Eye can ſee, for it may hear the noiſe of a troop afar off, perception being very ſubtil and active; Alſo there may ſeveral Copies be made from the Original and from the laſt Copy neareſt to the Ear, the Ear may take a pattern, and ſo pattern out the noiſe in the organ, without any ſtrokes to the Ear, for the *ſubtil* matter in all Creatures doth inform and perceive. But this is well to be obſerved, that the figures of objects are as ſoon made, as perceived by the ſenſitive motions in their work of patterning. And this is my Opinion concerning the Perception of Sound, which together with the reſt I leave to your Ladyſhips and others wiſer Judgment, and reſt,

MADAM,

Your faithful Friend

and Servant.

MA

XXIII.

MADAM,

I Perceive by your laſt, that you cannot well apprehend my meaning, when I ſay that the print or figure of a Body Printed or Carved, is not made by the motions of the body Printing or Carving it, but by the motions of the body or ſubſtance Printed or Carved; for ſay you, Doth a piece of Wood carve it ſelf, or a black Patch of a Lady cut its own figure by its own motions? Before I anſwer you, *Madam*, give me *leave to ask you this* queſtion, whether it be the motion of the hand, or the Inſtrument, or both, that print or carve ſuch or ſuch a body? Perchance you will ſay, that the motion of the hand moves the Inſtrument, and the *Inſtrument moves the Wood which is to be carved*: Then I ask, whether the motion that moves the Inſtrument, be the Inſtruments, or the Hands? Perchance you will ſay the Hands; but I anſwer, how can it be the Hands motion, if it be in the Inſtrument? You will ſay, perhaps, the motion of the hand is tranferred out of the hand into the inſtrument, and ſo from the inſtrument into the carved figure; but give me leave to ask you, was this motion of the hand, that was transferred, Corporeal or Incorporeal? If you ſay, Corporeal, then the hand muſt become leſs and weak, but if Incorporeal, I ask you, how a bodileſs motion can have force and ſtrength to carve and cut? But put an Impoſsible propoſition, as that there is an Immaterial motion, and

that this Incorporeal motion could be transferred out of one body into another; then I ask you, when the hand and inſtrument ceaſe to move, what is become of the motion? Perhaps you will ſay, the motion periſhes or is annihilated, and when the hand and the inſtrument do move again, to the carving or cutting of the figure, then a new Incorporeal Motion is created; Truly then there will be a perpetual creation and annihilation of Incorporeal motions, that is, of that which naturally is nothing; for an Incorporeal being is as much as a natural No-thing, for Natural reaſon cannot know nor have naturally any perception or Idea of an Incorporeal being: beſides, if the motion be Incorporeal, then it muſt needs be a ſupernatural Spirit, for there is not any thing elſe Immaterial but they, and then *it will* be either an Angel or a Devil, or the Immortal Soul of man; but if you ſay it is the ſupernatural Soul, truly I cannot be perſwaded that the ſupernatural Soul ſhould not have any other imployment then to carve or cut prints, or figures, or move in the hands, or heels, or legs, or arms of a Man; for other animals have the ſame kind of Motions, and then they might have a Supernatural Soul as well as Man, which moves in them. But if you ſay, that theſe tranferrable motions are material, then every action whereby the hand moves to the making or moving of ſome other body, would leſſen the number of the motions in the hand, and weaken it, ſo that in the writing of one letter, the hand would not be able to write a ſecond letter, at leaſt not a third. But I pray, *Madam*, conſider rationally, that though the Artificer or Workman be the occaſion of the motions of the carved body, yet the motions of

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the body that is carved, are they which put themſelves into ſuch or ſuch a figure, or give themſelves ſuch or ſuch a print as the Artificer intended; for a Watch, although the Artiſt or Watch-maker be the occaſional cauſe that the Watch moves in ſuch or ſuch an artificial figure, as the figure of a Watch, yet it is the Watches own motion by which it moves; for when you carry the Watch about you, certainly the Watch-makers hand is not then with it as to move it; or if the motion of the Watch-makers hand be transferred into the Watch, then certainly the Watch-maker cannot make another Watch, unleſs there be a new creation of new motions made in his hands; ſo that God and Nature would be as much troubled and concerned in the making of Watches, as in the making of a new World; for God created this World in ſix days, and reſted the ſeventh day, but this would be a perpetual Creation; Wherefore I ſay that ſome things may be Occaſional cauſes of other things, but not the Prime or Principal cauſes; and this diſtinction is very well to be conſidered, for there are no frequenter miſtakes then to confound theſe two different cauſes, which make ſo many confuſions in natural Philoſophy; and this is the Opinion of,

MADAM,

Your Faithful Friend

and Servant.

MA.

XXIV.

MADAM,

IN anſwer to your queſtion, What makes Eccho, I ſay, it is that which makes all the effects of Nature, *viz.* ſelf-moving matter; I know, the common opinion is, that Eccho is made like as the figure of a Face, or the like, in a Looking-glaſs, and that the Reverberation of ſound is like the Reflection of ſight in a Looking-glaſs; But I am not of that opinion, for both Eccho, and that wich is called the Reflection in a Looking-glaſs, are made by the ſelf-moving matter, by way of patterning and copying out. But then you will ask me, whether the glaſs takes the copy of the face, or the face prints its copy on the glaſs, or whether it be the *medium* of light and air that makes it? I anſwer, although many Learned men ſay, that as all perception, ſo alſo the ſeeing of ones face in a Looking-glaſs, and Eccho, are made by impreſsion and reaction; yet I cannot in my ſimplicity conceive it, how bodies that come not near, or touch each other, can make a figure by impreſsion and reaction: They ſay it proceeds from the motions of the *Medium* of light, or air, or both, *viz.* that the *Medium* is like a long ſtick with two ends, whereof one touches the object, the other the organ of ſenſe, and that one end of it moving, the other moves alſo at the ſame point of Time; by which motions it may make many ſeveral figures; But I cannot conceive, how this motion of preſsing forward and backward ſhould make

ſo many figures, wherein there is ſo much variety and curioſity. But, ſay light and air are as one figure, and like as a ſeal do print another body; I anſwer, if any thing could print, yet it is not probable, that ſo ſoft and rare bodies as light and air, could print ſuch ſolid bodies as glaſs, nor could air by reverberation make ſuch a ſound as Eccho. But miſtake me not, for, *I do not ſay*, that the Corporeal motions of light or air, cannot, or do not pencil, copie, or pattern out any figure, for both light and air are very active in ſuch ſorts of Motions, but I ſay, they cannot do it on any other bodies but their own. But to cut off tedious and unneceſſary diſputes, I return to the expreſsing of my own opinion, and believe, that the glaſs in its own ſubſtance doth *figure out the copy of the face*, or the like, and from that copy the ſenſitive motions in the eyes take another copy, and ſo the rational from the ſenſitive; and in this manner is made both rational and ſenſitive perception, *ſight and knowledg. The ſame with Ecchoes*; for the air patterns out the copy of the ſound, and then the ſenſitive corporeal motions in the ear pattern again this copy from the air, and ſo do make the perception and ſenſe of hearing. You may ask me, *Madam*, if it be ſo, that the glaſs and the air copy out the figure of the face and of ſound, whether the Glaſs may be ſaid to ſee and the Air to ſpeak? I anſwer, I cannot tell that; for though I ſay, that the air repeats the words, and the glaſs repreſents the face, yet I cannot gueſs what their perceptions are, onely this I may ſay, that the air hath an elemental, and the glaſs a mineral, but not an animal perception. But if theſe figures were made by the preſſures of ſeveral objects or parts, and by reaction, there could not be ſuch variety

as there is, for they could but act by one ſort of motion: Likewiſe is it improbable, that ſounds, words or voices, ſhould like a company of Wild-Geeſe fly in the air, and ſo enter into the ears of the hearers, as they into their neſts: Neither can I conceive, how in this manner a word can enter ſo many ears, that is, be divided into every ear, and yet ſtrike every ear with an undivided vocal ſound; You will ſay, as a ſmall fire doth heat and warm all thoſe that ſtand by; for the heat iſſues from the fire, as the light from the Sun. I anſwer, all what iſſues and hath motion, hath a Body, and yet moſt learned men deny that ſound, light and heat have bodies: But if they grant of light that it has a body, they ſay it moves and preſſes the air, and the air the eye, and ſo of heat; which if ſo, then the air muſt not move to any other motion but light, and onely to one ſort of light, as the Suns light; for if it did move in any other motion, it would diſturb the light; for if a Bird did but fly in the air, it would give all the region of air another motion, and ſo put out, or alter the light, or at leaſt diſturb it; and wind would make a great diſturbance in it. Beſides, if one body did give another body motion, it muſt needs give it alſo ſubſtance, for motion is either ſomething or nothing, body or no body, ſubſtance or no ſubſtance; if nothing, it cannot enter into another body; if ſomething, it muſt leſſen the bulk of the body it quits, and increaſe the bulk of the body it enters, and ſo the Sun and Fire with giving light and heat, would become leſs, for they cannot both give and keep at once, for this is as impoſsible, as for a man to give to another creature his human Nature, and yet to keep it ſtill. Wherefore my opinion is for heat, that

when many men ſtand round about a fire, and are heated and warmed by it, the fire doth not give them any thing, nor do they receive ſomething from the fire, but the ſenſitive motions in their bodies pattern out the object of the fires heat, and ſo they become more or leſs hot according as their patterns are numerous or perfect. And as for air, it patterns out the light of the Sun, and the ſenſitive motions in the eyes of animals pattern out the light in the air. The like for Ecchoes, or any other ſound, and for the figures which are preſented in a Looking-glaſs. And thus millions of parts or creatures may make patterns of one or more objects, and the objects neither give nor looſe any thing. And this I repeat here, that my meaning of Perception may be the better underſtood, which is the deſire of,

MADAM,

Your faithful Friend,

and Servant.

XXV.

MADAM,

I Perceive you are not fully ſatisfied with my former Letter concerning Eccho, and a figure preſented in a Looking-glaſs; for you ſay, how is it poſſible, if Eccho conſiſts in the ears patterning out of a voice or ſound, but that it will make a confuſion in all the parts of the air? My anſwer is, that I doe not ſay that Eccho is

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onely made by the patterning out of the voice or ſound, but by repeating the ſame voice or ſound, which repetition is named an Eccho, for millions of ears in animals may pattern out a voice or words, and yet never repeat them, and ſo may millions of parts of the air; wherefore Eccho doth not conſiſt in the bare patterning out, but in the repetition of the ſame ſound or words, which are pattern'd out; and ſo ſome parts of the air may at one and the ſame time pattern out a ſound and not repeat it, and ſome may both pattern out, and repeat it, but ſome may neither pattern out, nor repeat it, and therefore the Repetition, not the bare Patterning out is called Eccho: Juſt as when two or more men do anſwer or mock each other, and repeat each others words, it is not neceſſary, if there were a thouſand ſtanders by, that they ſhould all do the ſame. And as for the figure preſented in a Looking-glaſs, I cannot conceive it to be made by preſſure and reaction; for although there is both preſſure and reaction in nature, and thoſe very frequent amongſt natures Parts, yet they do neither make perception nor production. although both preſſure and reaction are made by corporeal ſelf-motions; Wherefore the figure preſented in a Looking-glaſs, or any other ſmooth glaſsie body, is, in my opinion, onely made by the motions of the Looking-glaſs, which do both pattern out, and preſent the figure of an external object in the Glaſs: But you will ſay, why do not the motions of other bodies pattern out, and preſent the figures of external objects, as well as ſmooth glaſsie bodies do? I anſwer, they may pattern out external objects, for any thing I know, but the reaſon that their figures are not preſented to our eyes, lies partly in the preſenting ſubject it ſelf, partly

in our ſight; for it is obſerved, that two things are chiefly required in a ſubject that will preſent the figure of an external object; firſt it muſt be ſmooth, even and glaſsie, next it muſt not be tranſparent: the firſt is manifeſt by experience; for the ſubject being rough and uneven, will never be able to preſent ſuch a figure; as for example, A piece of ſteel rough and unpoliſhed, although it may perhaps pattern out the figure of an external object, yet it will never preſent its figure, but as ſoon as it is poliſhed, and made ſmooth and glaſsie, the figure is preſently perceived. But this is to be obſerved, that ſmooth and glaſsie bodies do not always pattern out exterior objects exactly, but ſome better, ſome worſe; like as Painters have not all the ſame ingenuity; neither do all eyes pattern out all objects exactly; which proves that the perception of ſight is not made by preſſure and reaction, otherwiſe there would be no difference, but all eyes would ſee alike. Next I ſay, it is obſerved, that the ſubject which will preſent the figure of an external object, muſt not be tranſparent; the reaſon is, that the figure of Light being a ſubſtance of a piercing and penetrating quality, hath more force on tranſparent, then on other ſolid dark bodies, and ſo diſturbs the figure of an external object pattern'd out in a tranſparent body, and quite over-maſters it. But you wil ſay, you have found by experience, that if you hold a burning Candle before a Tranſparent-glaſs, although it be in an open Sun-light, yet the figure of light and flame of the Candle will clearly be ſeen in the Glaſs. I anſwer, that it is an other thing with the figure of Candle-light, then of a duskiſh or dark body; for a Candle-light, though it is not of the ſame

ſort as the Suns light, yet it is of the ſame nature and quality, and therefore the Candle-light doth reſiſt and oppoſe the light of the Sun, ſo that it cannot have ſo much power over it, as over the figures of other bodies patterned out and preſented in Tranſparent-glaſs. Laſtly, I ſay, that the fault often-times lies in the perceptive motions of our ſight, which is evident by a plain and Concave-glaſs; for in a plain Looking-glaſs, the further you go from it, the more your figure preſented in the glaſs ſeems to draw backward; and in a Concave-glaſs, the nearer you go to it, the more ſeems your figure to come forth: which effects are like as an houſe or tree appears to a Traveller; for, as the man moves from the houſe or tree, ſo the houſe or tree ſeems to move from the man; or like one that ſails upon a Ship, who imagines that the Ship ſtands ſtill, and the Land moves; when as yet it is the Man and the Ship that moves, and not the Houſe, or Tree, or the Land: ſo when a Man turns round in a quick motion, or when his head is dizzie, he imagines the room or place, where he is, turns round. Wherefore it is the Inherent Perceptive motions in the Eye, and not the motions in the Looking-glaſs, which cauſe theſe effects. And as for ſeveral figures that are preſented in one glaſs, it is abſurd to imagine that ſo many ſeveral figures made by ſo many ſeveral motions ſhould touch the eye; certainly this would make ſuch a diſturbance, if all figures were to enter or but to touch the eye, as the eye would not perceive any of them, at leaſt not diſtinctly; Wherefore it is moſt probable that the glaſs patterns out thoſe figures, and the ſenſitive corporeal motions in the eye take again a pattern from thoſe figures patterned out by the glaſs, and ſo make

copies

copies of copies; but the reaſon why ſeveral figures are preſented in one glaſs in ſeveral places, is, that two perfect figures cannot be in one point, nor made by one motion, but by ſeveral corporeal motions. Concerning a Looking-glaſs, made in the form or ſhape of a Cylinder, why it repreſents the figure of an external object in an other ſhape and poſture then the object is, the cauſe is the ſhape and form of the Glaſs, and not the patterning motions in the Glaſs. But this diſcourſe belongs properly to the Opticks, wherefore I will leave it to thoſe that are verſed in that Art, to enquire and ſearch more after the rational truth thereof. In the mean time, my opinion is, that though the object is the occaſion of the figure preſented in a Looking-glaſs, yet the figure is made by the motions of the glaſs or body that preſents it, and that the figure of the glaſs perhaps may be patterned out as much by the motions of the object in its own ſubſtance, as the figure of the object is patterned out and preſented by the motions of the glaſs in its own body or ſubſtance. And thus I conclude and reſt,

MADAM

Your Faithful Friend

and Servant.

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XXVI.

MADAM,

SInce I mentioned in my laſt that Light did diſturb the figures of External objects preſented in Tranſparent bodies; you were pleaſed to ask, Whether light doth penetrate tranſparent bodies? I anſwer, for any thing I know, it may; for when I conſider the ſubtil, piercing and penetrating nature of light, I believe it doth; but again, when I conſider that light is preſented to our ſight by tranſparent bodies onely, and not by duskiſh and dark bodies, and yet that thoſe duskiſh bodies are more porous then the tranſparent bodies, ſo that the light hath more paſſage to paſs through them, then through tranſparent bodies; but that on the contrary, thoſe dark bodies, as Wood, and the like, do quite obſcure the light, when as tranſparent bodies, as Glaſs, *&c.* tranſmit it, I am half perſwaded that the tranſparent bodies, as Glaſs, rather preſent the Light by patterning it out, then by giving it paſſage: Alſo I am of a mind, that the air in a room may pattern out the Light from the Glaſs, for the Light in a room doth not appear ſo clear as in the Glaſs; alſo if the Glaſs be any way defective, it doth not preſent the Light ſo perfectly, whereas, if it were the penetration of light through the glaſs, the light would paſs through all ſorts of glaſs alike, which it doth not, but is more clearly ſeen through ſome, and more obſcurely through others, according to the goodneſs or purity of the glaſs. But you may ſay,

that

that the light divulges the imperfection or goodneſs of the glaſs; I anſwer, ſo it doth of any other objects perceived by our ſight; for light is the preſenter of objects to the ſenſe and perception of ſight, and for any thing I know, the corporeal optick motions make the figure of light, the ground figure of all other figures patterned out by the corporeal optick motions, as in dreams, or when as ſome do ſee in the dark, that is, without the help of exterior light. But you may ſay, That if the glaſs and the air in a room did pattern out the figure of light, thoſe patterns of light would remain when light is abſent: I anſwer, That is not uſual in nature; for when the object removes, the Pattern alters; I will not ſay but that the corporeal optick motions may work by rote without objects, but that is irregular, as in ſome diſtempers. And thus, *Madam*, I have given you my opinion alſo to this your queſtion; if you have any more ſcruples, I pray let me know of them, and aſſure your ſelf that I ſhall be ready upon all occaſions to expreſs my ſelf,

MADAM,

Your humble and faithful Servant.

XXVII.

MADAM,

YOur deſire is to know, why ſound is louder in a Vault, and in a large Room then in a leſs? I anſwer, A Vault or arched Figure is the freeſt from obſtruction, as being without corners and points, ſo as

the ſenſitive and rational corporeal motions of the Ear can have a better perception; like as the Eye can ſee fartheſt from a hill then being upon a level ground, becauſe the proſpect is freer from the hill, as without obſtruction, unleſs it be ſo cloudy that the clouds do hinder the perception; And as the eye can have a better proſpect upon a hill, ſo the ear a ſtronger perception in a Vault; And as for ſound, that it is better perceived in a large, then in a little cloſe room or place, it is ſomewhat like the perception of ſent, for the more the odorous parts are bruiſed, the ſtronger is that perception of ſent, as being repeated double or treble, which makes the perception ſtronger, like as a thick body is ſtronger then a thin one; So likewiſe the perception of ſound in the air; for though not all the parts of the air make repetitions, yet ſome or many make patterns of the ſound; the truth is, Air is as induſtrious to divulge or preſent a ſound, by patterns to the Ear, as light doth objects to the Eye. But then you may ask me, Why a long hollow pipe doth convey a voice to the ear more readily, then any large and open place? My anſwer is, That the Parts of the air in a long pipe are more Compoſed and not at liberty to wander, ſo that upon neceſsity they muſt move onely to the patterning out of the ſound, having no choice, which makes the ſound much ſtronger, and the perception of the Ear perfecter; But as for Pipes, Vaults, Proſpects, as alſo figures preſented in a room through a little hole, inverted, and many the like, belongs more to Artiſts then to my ſtudy, for though Natural Philoſophy gives or points out the Ground, and ſhews the reaſon, yet it is the Artiſt that Works: Beſides it

is more proper for Mathematicians to diſcourſe of, which ſtudy I am not verſed in; and ſo leaving it to them, I reſt,

MADAM,

Your faithful Friend

and Servant.

XXVIII.

MADAM,

FRom Sound I am come to Sent, in the diſcourſe whereof, your *Author* * is pleaſed to ſet down theſe following propoſitions: 1. *That ſmelling is hindred by cold and helped by heat:* 2. *That when the Wind bloweth from the object, the ſmell is the ſtronger, and when it blowes from the ſentient towards the object, the weaker, which by experience is found in dogs, that follow the track of beaſts by the Sent:* 3. *That ſuch bodies as are laſt pervious to the fluid medium, yield leſs ſmell then ſuch as are more pervious:* 4. *That ſuch bodies as are of their own nature odorous, become yet more odorous, when they are bruiſed:* 5. *That when the breath is ſtopped (at leaſt in man) nothing can be ſmelt:* 6. *That the Senſe of ſmelling is alſo taken away by the ſtopping of the Noſtrils, though the mouth be left open.* To begin from the laſt, I ſay, that the noſe is like the other ſenſitive organs, which if they be ſtopt, the corporeal ſenſitive motions cannot take copies of the exterior objects, and therefore

* *Ch.* 29 *art.* 12.

muſt

muſt alter their action of patterning to ſome other, for when the eye is ſhut and cannot perceive outward objects then it works to the Senſe of Touch, or on the inſide of the organ to ſome phantaſmes; and ſo do the reſt of the Senſes. As for the ſtopping of breath, why it hinders the Sent, the cauſe is, that the noſtrils and the mouth are the chief organs, to receive air and to let out breath: but though they be common paſſages for air and breath, yet taſte is onely made in the mouth and tongue, and ſent in the noſe; not by the preſſure of meat, and the odoriferous object, but by patterning out the ſeveral figures or objects of ſent and taſte, for the noſe and the mouth will ſmell and taſte one, nay ſeveral things at the ſame time, like as the eye will ſee light, colour, and other objects at once, which I think can hardly be done by preſſures; and the reaſon is, that the ſenſitive motions in the ſenſitive organs make patterns of ſeveral objects at one time, which is the cauſe, that when flowers, and ſuch like odoriferous bodies are bruiſed, there are as many figures made as there are parts bruiſed or divided, and by reaſon of ſo many figures the ſenſitive knowledg is ſtronger; but that ſtones, minerals, and the like, ſeem not ſo ſtrong to our ſmell, the reaſon is, that their parts being cloſe and united, the ſenſitive motions in the organ cannot ſo readily perceive and pattern them out, as thoſe bodies which are more porous and divided. But as for the wind blowing the ſent either to or from the ſentient, it is like a window or door that by the motion of opening and ſhutting, hinders or diſturbeth the ſight; for bodies coming between the object and the organ, make a ſtop of that perception. And as for the Dogs ſmelling out the track of Beaſts, the cauſe

is, that the earth or ground hath taken a copy of that ſent, which copy the ſenſitive motions in the noſe of the Dog do pattern out, and ſo long as that figure or copy laſts, the Dog perceives the ſent, but if he doth not follow or hunt readily, then there is either no perfect copy made by the ground, or otherwiſe he cannot find it, which cauſes him to ſeek and ſmell about until he hath it; and thus ſmell is not made by the motion of the air, but by the figuring motions in the noſe: Where it is alſo to be obſerved, that not onely the motions in one, but in millions of noſes, may pattern out one little object at one time, and therefore it is not, that the object of ſent fills a room by ſending out the ſent from its ſubſtance, but that ſo many figures are made of that object of ſent by ſo many ſeveral ſenſitive motions, which pattern the ſame out; and ſo the air, or ground, or any other creature, whoſe ſenſitive motions pattern out the object of ſent, may perceive the ſame, although their ſenſitive organs are not like to thoſe of animal creatures; for if there be but ſuch ſenſitive motions and perceptions, it is no matter for ſuch organs. Laſtly, it is to be obſerved, That all Creatures have not the ſame ſtrength of ſmelling, but ſome ſmell ſtronger, ſome weaker, according to the diſpoſition of their ſenſitive motions: Alſo there be other parts in the body, which pattern out the object of ſent, beſides the noſe, but thoſe are interior parts, and take their patterns from the noſe as the organ properly deſigned for it; neither is their reſentment the ſame, becauſe their motions are not alike, for the ſtomack may perceive and pattern out a ſent with a-

verſion, when the noſe may pattern it out with pleaſure. And thus much alſo of Sent; I conclude and reſt,

MADAM,

Your faithful Friend.

and Servant.

XXIX.

MADAM,

CONcerning your Learned Authors diſcourſe of Denſity and Rarity, he defines * *Thick to be that, which takes up more parts of a ſpace given; and thin, which containes fewer parts of the ſame magnitude: not that there is more matter in one place then in an other equal place, but a greater quantity of ſome named body; wherefore the multitude and paucity of the parts contained within the ſame ſpace do conſtitute denſity and rarity.* Whereof my opinion is, That there is no more nor leſs ſpace or place then body according to its dilation or contraction, and that ſpace and place are dilated and contracted with the body, according to the magnitude of the body, for body, place and magnitude are the ſame thing, only place is in regard of the ſeveral parts of the body, and there is as well ſpace betwixt things diſtant a hairs breadth from one another, as betwixt things diſtant a million of miles, but yet this ſpace is nothing from the body; but it makes, that that body

* C. 30. a. 1.

has not the ſame place with this body, that is, that this body is not that body, and that this bodies place is not that bodies place. Next your *Author* ſayes, * *He hath already clearly enough demonſtrated, that there can be no beginning of motion, but from an external and moved body, and that heavy bodies being once caſt upwards cannot be caſt down again, but by external motion.* Truly, *Madam*, I will not ſpeak of your *Authors* demonſtrations, for it is done moſt by art, which I have no knowledg in, but I think I have probably declared, that all the actions of nature are not forced by one part, driving, preſsing, or ſhoving another, as a man doth a wheel-barrow, or a whip a horſe; nor by reactions, as if men were at foot-ball or cuffs, or as men with carts meeting each other in a narrow lane. But to prove there is no ſelf-motion in nature, he goes on and ſays; *To attribute to created bodies the power to move themſelves, what is it elſe, then to ſay that there be creatures which have no dependance upon the Creator?* To which I anſwer, That if man (who is but a ſingle part of nature) hath given him by God the power and a free will of moving himſelf, why ſhould not God give it to Nature? Neither can I ſee, how it can take off the dependance upon God, more then Eternity; for if there be an Eternal Creator, there is alſo an Eternal Creature, and if an Eternal Maſter, an Eternal Servant, which is Nature; and yet Nature is ſubject to Gods Command; and depends upon him; and if all Gods Attributes be Infinite, then his Bounty is Infinite alſo, which cannot be exerciſed but by an Infinite Gift, but a Gift doth not cauſe a leſs dependance. I do not ſay, That man hath an abſolute Free-will, or power

* Art. 2.

to

to move, according to his deſire; for it is not conceived, that a part can have an abſolute power: nevertheleſs his motion both of body and mind is a free and ſelf-motion, and ſuch a ſelf-motion hath every thing in Nature according to its figure or ſhape; for motion and figure, being inherent in matter, matter moves figuratively. Yet do I not ſay, That there is no hindrance, obſtruction and oppoſition in nature; but as there is no particular Creature, that hath an abſolute power of ſelf-moving; ſo that Creature which hath the advantage of ſtrength, ſubtilty, or policy, ſhape, or figure, and the like, may oppoſe and over-power another which is inferior to it, in all this; yet this hinderance and oppoſition doth not take away ſelf-motion. But I perceive your *Author* is much for neceſsitation, and againſt free-will, which I leave to Moral Philoſophers and Divines. And as for the aſcending of light, and deſcending of heavy bodies, there may be many cauſes, but theſe four are perceiveable by our ſenſes, as bulk, or quantity of body, groſsneſs of ſubſtance, denſity, and ſhape or figure, which make heavy bodies deſcend: But little quantity, purity of ſubſtance, rarity, and figure or ſhape make light bodies aſcend. Wherefore I cannot believe, that there are *certain little bodies as atoms, and by reaſon of their ſmallneſs, inviſible; differing from one another in conſiſtence, figure, motion and magnitude, intermingled with the air*, which ſhould be the cauſe of the deſcending of heavy bodies. And concerning air, *whether it be ſubject to our ſenſes or not*, I ſay, that if air be neither hot, nor cold, it is not ſubject; but if it be, the ſenſitive motions will ſoon pattern it out, and declare it. I'le conclude with your *Authors* queſtion, *What*

the

the cauſe is, that a man doth not feel the weight of Water in Water? and anſwer, it is the dilating nature of Water. But of this queſtion and of Water I ſhall treat more fully hereafter, and ſo I reſt,

MADAM,

Your faithful Friend

and Servant.

XXX.

MADAM,

I Am reading now the works of that Famous and moſt Renowned *Author, Des Cartes,* out of which I intend to pick out onely thoſe diſcourſes which I like beſt, and not to examine his opinions, as they go along from the beginning to the end of his books; And in order to this, I have choſen in the firſt place, his diſcourſe of motion, and do not aſſent to his opinion, *Philoſ. p. 2. Art. 25.* when he defines *Motion to be onely a Mode of a thing, and not the thing or body it ſelfe*; for, in my opinion, there can be no abſtraction made of motion from body, neither really, nor in the manner of our conception, for how can I conceive that which is not, nor cannot be in nature, that is, to conceive motion without body? Wherefore Motion is but one thing with body, without any ſeparation or abſtraction ſoever. Neither doth it agree with my reaſon, that *one body can give or tranſ- Art. 40. fer motion into another body; and as much motion it gives*

or transferrs into that body, as much loſes it: As for example, in two hard bodies thrown againſt one another, where one, that is thrown with greater force, takes the other along with it, and loſes as much motion as it gives it. For how can motion, being no ſubſtance, but onely a mode, quit one body, and paſs into another? One body may either occaſion, or imitate anothers motion, but it can neither give nor take away what belongs to its own or another bodies ſubſtance, no more then matter can quit its nature from being matter; and therefore my opinion is, that if motion doth go out of one body into another, then ſubſtance goes too; for motion, and ſubſtance or body, as afore-mentioned, are all one thing, and then all bodies that receive motion from other bodies, muſt needs increaſe in their ſubſtance and quantity, and thoſe bodies which impart or transferr motion, muſt decreaſe as much as they increaſe: Truly, *Madam*, that neither Motion nor Figure ſhould ſubſiſt by themſelves, and yet be transferrable into other bodies, is very ſtrange, and as much as to prove them to be nothing, and yet to ſay they are ſomething. The like may be ſaid of all others, which they call accidents, as skill, learning, knowledge, *&c.* ſaying, they are no bodies, becauſe they have no extenſion, but inherent in bodies or ſubſtances as in their ſubjects; for although the body may ſubſiſt without them, yet they being always with the body, body and they are all one thing: And ſo is power and body, for body cannot quit power, nor power the body, being all one thing. But to return to Motion, my opinion is, That all matter is partly animate, and partly inanimate, and all matter is moving and moved, and that there is no part of Nature

that-

that hath not life and knowledg, for there is no Part that has not a comixture of animate and inanimate matter; and though the inanimate matter has no motion, nor life and knowledg of it ſelf, as the animate has, nevertheleſs being both ſo cloſely joyned and commixed as in one body, the inanimate moves as well as the animate, although not in the ſame manner; for the animate moves of it ſelf, and the inanimate moves by the help of the animate, and thus the animate is moving and the inanimate moved; not that the animate matter tranſfers, infuſes, or communicates its own motion to the inanimate; for this is impoſsible, by reaſon it cannot part with its own nature, nor alter the nature of inanimate matter, but each retains its own nature; for the inanimate matter remains inanimate, that is, without ſelf-motion, and the animate loſes nothing of its ſelf-motion, which otherwiſe it would, if it ſhould impart or transferr its motion into the inanimate matter; but onely as I ſaid heretofore, the inanimate works or moves with the animate, becauſe of their cloſe union and commixture; for the animate forces or cauſes the inanimate matter to work with her; and thus one is moving, the other moved, and conſequently there is life and knowledg in all parts of nature, by reaſon in all parts of nature there is a commixture of animate and inanimate matter: and this Life and Knowledg is ſenſe and reaſon, or ſenſitive and rational corporeal motions, which are all one thing with animate matter without any diſtinction or abſtraction, and can no more quit matter, then matter can quit motion. Wherefore every creature being compoſed of this commixture of animate and inanimate matter, has alſo ſelfe-motion, that is life and knowledg,

ſenſe

ſenſe and reaſon, ſo that no part hath need to give or receive motion to or from another part; although it may be an occaſion of ſuch a manner of motion to another part, and cauſe it to move thus or thus: as for example, A Watch-maker doth not give the watch its motion, but he is onely the occaſion, that the watch moves after that manner, for the motion of the watch is the watches own motion, inherent in thoſe parts ever ſince that matter was, and if the watch ceaſes to move after ſuch a manner or way, that manner or way of motion is never the leſs in thoſe parts of matter, the watch is made of, and if ſeveral other figures ſhould be made of that matter, the power of moving in the ſaid manner or mode, would yet ſtill remain in all thoſe parts of matter as long as they are body, and have motion in them. Wherefore one body may occaſion another body to move ſo or ſo, but not give it any motion, but every body (though occaſioned by another, to move in ſuch a way) moves by its own natural motion; for ſelf-motion is the very nature of animate matter, and is as much in hard, as in fluid bodies, although your *Author* denies it, ſaying, *The nature of fluid bodies conſiſts in the motion of thoſe little inſenſible parts into which they are divided, and the nature of hard bodies, when thoſe little particles joyned cloſely together, do reſt*; for there is no reſt in nature; wherefore if there were a World of Gold, and a World of Air, I do verily believe, that the World of Gold would be as much interiouſly active, as the World of Air exteriouſly; for Natures motions are not all external or perceptible by our ſenſes, neither are they all circular, or onely of one ſort, but there is an infinite change and variety of motions; for though

Philoſ part. 1. *a.* 54.

I ſay in my Philoſophical opinions, * *As there is but one onely Matter, ſo there is but one onely Motion*; yet I do not mean, there is but one particular ſort of motions, as either circular, or ſtraight, or the like, but that the nature of motion is one and the ſame, ſimple and intire in it ſelf, that is, it is meer motion, or nothing elſe but corporeal motion; and that as there are infinite diviſions or parts of matter, ſo there are infinite changes and varieties of motions, which is the reaſon that I call motion as well infinite as matter; firſt that matter and motion are but one thing, and if matter be infinite, motion muſt be ſo too; and ſecondly, that motion *is infinite in* its changes and variations, as matter is in its parts. And thus much of motion for this time; I add no more, but reſt,

* *Part. 1. c. 5.*

MADAM,

Your faithful Friend,

and Servant.

XXXI.

MADAM,

I Obſerve your *Author* in his diſcourſe of Place makes a difference betwixt an *Interior and Exterior place*, and that according to this diſtinction, *one body may be ſaid to change, and not to change its place at the ſame time, and that one body may ſucceed into anothers place.* But I am not of this opinion, for I believe

Philoſ. p. 2 a. 10, 11, 12 13, 14.

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not that there is any more place then body; as for example, Water being mix'd with Earth, the water doth not take the Earths place, but as their parts intermix, ſo do their places, and as their parts change, ſo do their places, ſo that there is no more place, then there is water and earth; the ſame may be ſaid of Air and Water, or Air and Earth, or did they all mix together; for as their bodies join, ſo do their places, and as they are ſeparated from each other, ſo are their places: Say a man travels a hundred miles, and ſo a hundred thouſand paces; but yet this man has not been in a hundred thouſand places, for he never had any other place but his own, he hath joined and ſeparated himſelfe from a hundred thouſand, nay millions of parts, but he *has left* no places behind *him*. You *will* ſay, *if he* travel the ſame way back again, then he is ſaid to travel thorow the ſame places. I anſwer, It may be the vulgar way of expreſsion, or the common phraſe; but to ſpeak properly, after a Philoſophical way, and according to the truth in nature, he cannot be ſaid to go back again thorow the ſame places he went, becauſe he left none behind him, or els all his way would be nothing but place after place, all the hundred miles along; beſides if place ſhould be taken ſo, as to expreſs the joyning to the neereſt bodies which compaſs him about, certainly he would never find his places again; for the air being fluid, changes or moves continually, and perchance the ſame parts of the air, which compaſſed him once, will never come near him again. But you may ſay, If a man be hurt, or hath ſome miſchance in his body, ſo as to have a piece of fleſh cut out, and new fleſh growing there; then we ſay, becauſe the adjoyning parts do not

not change, that a new piece of fleſh is grown in the ſame place where the former fleſh was, and that the place of the former fleſh cut or fallen out, is the ſame of this new grown fleſh. I anſwer, In my opinion, it is not, for the parts being not the ſame, the places are not, but every one hath its own place. But if the wound be not filled or cloſed up with other new fleſh, you will ſay, that according to my opinion there is no place then at all. I ſay, Yes, for the air or any thing elſe may be there, as new parts joyning to the other parts; nevertheleſs, the air, or that ſame body which is there, hath not taken the fleſhes place, which was there before, but hath its own; but, by reaſon the adjoyning parts remain, man thinks the place remains there alſo which is no conſequence. 'Tis true, a man may return to the ſame adjoining bodies, where he was before, but then he brings his place with him again, and as his body, ſo his place returnes alſo, and if a mans arm be cut off, you may ſay, there was an arm heretofore, but you cannot ſay properly, this is the place where the arm was. But to return to my firſt example of the mixture of Water, and Earth or Air; Suppoſe water is not porous, but onely dividable, and hath no other place but what is its own bodies, and that other parts of water intermix with it by dividing and compoſing; I ſay, there is no more place required, then what belongs to their own parts, for if ſome contract, others dilate, ſome divide, others joyn, the places are the ſame according to the magnitude of each part or body. The ſame may be ſaid of all kinds or ſorts of mixtures, for one body hath but one place; and ſo if many parts of the ſame nature joyn into one body and increaſe the bulk of the body,

the place of that ſame body is accordingly; and if they be bodies of different natures which intermix and joyne, each ſeveral keeps its place; And ſo each body and each particular part of a body hath its place, for you cannot name body or part of a body, but you muſt alſo underſtand place to be with them, and if a point ſhould dilate to a world, or a world contract to a point, the place would always be the ſame with the body. And thus I have declared my opinion of this ſubject, which *I* ſubmit to the correction of your better judgment, and reſt

MADAM,

Your Ladiſhips

faithful Friend and humble Servant.

XXXII.

MADAM,

IN my laſt, I hope, I have ſufficiently declared my opinion, That to one body belongs but one place, and that no body can leave a place behind it, but whereſoever is body, there is place alſo. Now give me leave to examine this queſtion: when a bodies figure is printed on ſnow, or any other fluid or ſoft matter, as air, water, and the like; whether it be the body that prints its own figure upon the ſnow; or whether it be the ſnow, that patterns the figure of the body? My anſwer is, That it is not the body, which

prints

prints its figure upon the ſnow, but the ſnow that patterns out the figure of the body; for if a ſeal be printed upon wax, 'tis true, it is the figure of the ſeal, which is printed on the wax, but yet the ſeal doth not give the wax the print of its own figure, but it is the wax that takes the print or pattern from the ſeal, and patterns or copies it out in its own ſubſtance, juſt as the ſenſitive motions in the eye do pattern out the figure of an object, as I have declared heretofore. But you will ſay, perhaps, A body being printed upon ſnow, as it leaves its print, ſo it leaves alſo its place with the print in the ſnow. I anſwer, That doth not follow; For the place remains ſtill the bodies place, and when the body removes out of the ſnow, it takes its place along with it: Juſt *like a man*, whoſe picture is drawn by a Painter, when he goes away, he leaves not his place with his picture, but his place goes with his body; and as the place of the picture is the place of the colour or paint, and *the place of the copie of an exterior object patterned* out by the ſenſitive corporeal motions is the place of the ſenſitive organ, ſo the place of the print in ſnow, is the ſnows place; or elſe, if the print were the bodies place that is printed, and not the ſnow's, it might as well be ſaid, that the motion and ſhape of a watch were not the motion and ſhape of the watch, but of the hand of him that made it. And as it is with ſnow, ſo it is with air, for a mans figure is patterned out by the parts and motions of the air, whereſoever he moveth; the difference is onely, that air being a fluid body doth not retain the print ſo long, as ſnow or a harder body doth, but when the body removes, the print is preſently diſſolved. But I wonder much, your *Author* denies,

that there can be two bodies in one place, and yet makes two places for one body, when all is but the motions of one body: Wherefore a man ſailing in a Ship, cannot be ſaid to keep place, and to change his place; for it is not place he changes, but onely the adjoyning parts, as leaving ſome, and joyning to others; and it is very improper, to attribute that to place which belongs to parts, and to make a change of place out of change of parts. I conclude, repeating once again, that figure and place are ſtill remaining the ſame with body; For example; let a ſtone be beat to duſt, and this duſt be ſeverally diſperſed, nay, changed into numerous figures; I ſay, as long as the ſubſtance of the ſtone remains in the power of thoſe diſperſed and changed parts, and their corporeal motions, the place of it continues alſo; and as the corporeal motions change and vary, ſo doth place, magnitude and figure, together with their parts or bodies, for they are but one thing. And ſo I conclude, and reſt

MADAM,

Your Faithful Friend

and Servant.

XXXIII.

MADAM,

I Am abſolutely of your *Authors* opinion, when he ſayes, *That all bodies of this Univerſe are of one and the ſame matter, really divided into many parts, and that theſe parts are diverſly moved:* But that theſe motions ſhould be circular more then of any other ſort, I cannot believe, although he thinks that this is the moſt probable way, to find out the cauſes of natural effects: for nature is not bound to one ſort of motions more then to another, and it is but in vain to indeavour to know how, and by what motions God did make the World, ſince Creation is an action of God, and Gods actions are incomprehenſible; Wherefore his æthereal *Whirlpooles*, and *little particles of matter*, which he reduceth to three ſorts and calls them the three elements of the Univerſe, their circular motions, ſeveral figures, ſhavings, and many the like, which you may better read, then I rehearſe to you, are to my thinking, rather Fancies, then rational or probable conceptions: for how can we imagine that the Univerſe was ſet a moving as a Top by a Whip, or a Wheele by the hand of a Spinſter, and that the vacuities were fill'd up with ſhavings: for theſe violent motions would rather have diſturbed and diſordered Nature; and though Nature uſes variety in her motions or actions, yet theſe are not extravagant, nor by force or violence, but orderly, temperate, free, and eaſie, which cauſes me *Philoſ. part 3. c. 46.*

to

to believe, the Earth turns about rather then the Sun; and though corporeal motions for variety make Whirl-winds, yet Whirl-winds are not conſtant, Neither can I believe that the ſwiftneſs of motion could make the matter more ſubtil and pure then it was by nature, for it is the purity and ſubtilty of the matter, that cauſes motion, and makes it ſwifter or ſlower, and not motion the ſubtilty and purity of matter; motion being onely the action of matter; and the ſelf-moving part of matter is the working part of nature, which is wiſe, and knows how to move and form every creature without inſtruction; and this ſelf-motion is as much her own as the other parts of her body, matter and figure, and is one and the ſame with her ſelf, as a corporeal living, knowing, and inſeparable being, and a part of her ſelf. As for the ſeveral parts of matter, I do believe, that they are not all of one and the ſame bigneſs, nor of one and the ſame figure, neither do I hold their figures to be unalterable; for if all parts in nature be corporeal, they are dividable, compoſable, and intermixable, and then they cannot be always of one and the ſame ſort of figure; beſides nature would not have ſo much work if there were no change of figures: and ſince her onely action is change of motion, change of motion muſt needs make change of figures: and thus natural parts of matter may change from lines to points, and from points to lines, from ſquares to circles, and ſo forth, infinite ways, according to the change of motions; but though they change their figures, yet they cannot change their matter; for matter as it has been, ſo it remaines conſtantly in each degree, as the Rational, Senſitive and Inanimate, none becomes purer, none groſſer

then

then ever it was, notwithſtanding the infinite changes of motions, which their figures undergo; for Motion changes onely the figure, not the matter it ſelf, which continues ſtill the ſame in its nature, and cannot be altered without a confuſion or deſtruction of Nature. And this is the conſtant opinion of,

MADAM,

Your faithful Friend

and humble Servant.

XXXIV.

MADAM,

THat *Rarefaction* is onely a *change of figure*, according to your *Authors* opinion, is in my reaſon very probable; but when he ſayes, that *in rarified bodies are little intervals or pores filled up with ſome other ſubtil matter*, if he means that all rarified bodies are porous, I diſſent from him; for it is not neceſſary that all rarified bodies ſhould be porous, and all hard bodies without pores: but if there were a probabilty of pores, I am of opinion, it would be more in denſe and hard, than in rare and ſoft bodies; as for example, rarifying and dilating motions are plaining, ſmoothing, ſpreading and making all parts even, which could not well be, if there were holes or pores; Earth is denſe and hard, and yet is porous, and flame is rare and dilating, and yet is not porous; and certainly Water is not ſo porous as Earth. *Philoſ. par 2. a. 6, 7.*

Wherefore pores, in my opinion, are according to the nature or form of the figure, and not according to the rarity or thinneſs, and denſity or thickneſs of the ſubſtance. As for his thin and ſubtil matter filling up the pores of porous bodies, I aſſent to your *Author* ſo farr that I meane, thin and thick, or rare and denſe ſubſtances are joyned and mixed together. As for plaining, ſmoothing and ſpreading, I do not mean ſo much artificial plaining and ſpreading; as for example, when a piece of gold is beaten into a thin plate, and a board is made plain and ſmooth by a Joyners *tool*, or a napkin folded up is ſpread plain and even, although, when you obſerve theſe arts, you may judge ſomewhat of the nature of natural dilations; for a folded cloth is fuller of creaſes then when plain, and the beating of a thin plate is like to the motion of dilation, which is to ſpread out, and the forme of rarifying is thinning and extending. I add onely this, that I am not of your *Authors* opinion, that Reſt is the Cauſe or Glue which keeps the parts of denſe or hard bodies together, but it is retentive motions. And ſo I conclude, reſting,

MADAM,

Your Faithful Friend

and Servant.

MA-

XXXV.

MADAM,

That the Mind, according to your *Authors* opinion, *is a ſubſtance really diſtinct from the body, and may be actually ſeparated from it and ſubſiſt without it*: If he mean the natural mind and ſoul of Man, not the ſupernatural or divine, I am far from his opinion; for though the mind moveth onely in its own parts, and not upon, or with the parts of inanimate matter, yet it cannot be ſeparated from theſe parts of matter, and ſubſiſt by its ſelf, as being a part of one and the ſame matter the inanimate is of, (for there is but one onely matter, and one kind of matter, although of ſeveral degrees,) onely it is the ſelf-moving part; but yet this cannot impower it to quit the ſame natural body, whoſe part it is. Neither can I apprehend, that the Mind's or Soul's ſeat ſhould be in the *Glandula* or kernel of the Brain, and there ſit like a Spider in a Cobweb, to whom the leaſt motion of the Cobweb gives intelligence of a Flye, which he is ready to aſſault, and that the Brain ſhould get intelligence by the animal ſpirits as his ſervants, which run to and fro like Ants to inform it; or that the Mind ſhould, according to others opinions, be a light, and imbroidered all with Ideas, like a Heraulds Coat; and that the ſenſitive organs ſhould have no knowledg in themſelves, but ſerve onely like peeping-holes for the mind, or barn-dores to receive bundles of preſſures, like ſheaves of Corn; For there being a thorow

row mixture of animate, rational and ſenſitive, and inanimate matter, we cannot aſsign a certain ſeat or place to the rational, another to the ſenſitive, and another to the inanimate, but they are diffuſed and intermixt throughout all the body; And this is the reaſon, that ſenſe and knowledg cannot be bound onely to the head or brain: But although they are mixt together, nevertheleſs they do not loſe their interior natures by this mixture, nor their purity and ſubtilty, nor their proper motions or actions, but each moves according to its nature and ſubſtance, without confuſion; The actions of the rational part in Man, which is the Mind or Soul, are called Thoughts, or thoughtful perceptions, which are numerous, and ſo are the ſenſitive perceptions; for though Man, or any other animal hath but five exterior ſenſitive organs, yet there be numerous perceptions made in theſe ſenſitive organs, and in all the body; nay, every ſeveral Pore of the fleſh is a ſenſitive organ, as well as the Eye, or the Ear. But both ſorts, as well the rational as the ſenſitive, are different from each other, although both do reſemble another, as being both parts of animate matter, as I have mentioned before: Wherefore I'le add no more, onely let you know, that I conſtantly remain,

MADAM,

Your faithful Friend

and Servant.

XXXVI.

MADAM,

THat all other animals, beſides man, want reaſon, your *Author* endeavours to prove in his *diſcourſe of method*, where his chief argument is, That other animals cannot expreſs their mind, thoughts or conceptions, either by ſpeech or any other ſigns, as man can do: For, ſayes he, *it is not for want of the organs belonging to the framing of words, as we may obſerve in Parrats and Pies, which are apt enough to expreſs words they are taught, but underſtand nothing of them.* My anſwer is, That one man expreſsing his mind by ſpeech or words to an other, doth not declare by it his excellency and ſupremacy above all other Creatures, but for the moſt part more folly, for a talking man is not ſo wiſe as a contemplating man. But by reaſon other Creatures cannot ſpeak or diſcourſe with each other as men, or make certain ſigns, whereby to expreſs themſelves as dumb and deaf men do, ſhould we conclude, they have neither knowledge, ſenſe, reaſon, or intelligence? Certainly, this is a very weak argument; for one part of a mans body, as one hand, is not leſs ſenſible then the other, nor the heel leſs ſenſible then the heart, nor the legg leſs ſenſible then the head, but each part hath its ſenſe and reaſon, and ſo conſequently its ſenſitive and rational knowledg; and although they cannot talk or give intelligence to each other by ſpeech, nevertheleſs each hath its own peculiar and

particular knowledge, juſt as each particular man has his own particular knowledge, for one man's knowledge is not another man's knowledge; and if there be ſuch a peculiar and particular knowledg in every ſeveral part of one animal creature, as man, well may there be ſuch in Creatures of different kinds and ſorts: But this particular knowledg belonging to each creature, doth not prove that there is no intelligence at all betwixt them, no more then the want of humane Knowledg doth prove the want of Reaſon; for reaſon is the rational part of matter, and makes perception, obſervation, and intelligence different in every creature, and every ſort of creatures, according to their proper natures, but perception, obſervation and intelligence do not make reaſon, Reaſon being the cauſe, and they the effects. Wherefore though other Creatures have not the ſpeech, nor Mathematical rules and demonſtrations, with other Arts and Sciences, as Men; yet may their perceptions and obſervations be as wiſe as Men's, and they may have as much intelligence and commerce betwixt each other, after their own manner and way, as men have after theirs: To which I leave them, and Man to his conceited prerogative and excellence, reſting

MADAM,

Your faithful Friend,

and Servant.

XXXVII.

MADAM,

COncerning *Senſe* and *Perception*, your *Authors* opinion is, That it is made by a *motion or impreſſion from the object upon the ſenſitive organ, which impreſſion, by means of the nerves, is brought to the brain, and ſo to the mind or ſoul, which onely perceives in the brain*; Explaining it by the example of a Man being blind, or walking in dark, who by the help of his ſtick can perceive when he touches a Stone, a Tree, Water, Sand, and the like; which example he brings to make a compariſon with the perception of Light; *For*, ſays he, *Light in a ſhining body, is nothing elſe but a quick and lively motion or action, which through the air and other tranſparent bodies tends towards the eye, in the ſame manner as the motion or reſiſtance of the bodies, the blind man meets withal, tends thorow the ſtick towards the hand; wherefore it is no wonder that the Sun can diſplay its rays ſo far in an inſtant, ſeeing that the ſame action, whereby one end of the ſtick is moved, goes inſtantly alſo to the other end, and would do the ſame if the ſtick were as long as Heaven is diſtant from Earth.* To which I anſwer firſt, That it is not onely the Mind that perceives in the kernel of the Brain, but that there is a double perception, rational and ſenſitive, and that the mind perceives by the rational, but the body and the ſenſitive organs by the ſenſitive perception; and as there is a double perception, ſo there is alſo a double knowledg, rational

Philoſ. part. 4. a. 189.

Diopt. c. 1. a. 2, 3. & c. 4. a. 1.

tional and ſenſitive, one belonging to the mind, the other to the body; for I believe that the Eye, Ear, Noſe, Tongue, and all the Body, have knowledg as well as the Mind, onely the rational matter, being ſubtil and pure, is not incumbred with the groſſer part of matter, to work upon, or with it, but leaves that to the ſenſitive, and works or moves onely in its own ſubſtance, which makes a differente between thoughts, and exterior ſenſes. Next I ſay, That it is not the Motion or Reaction of the bodies, the blind man meets withal, which makes the ſenſitive perception of theſe objects, but the ſenſitive corporeal motions in the hand do pattern out the figure of the Stick, Stone, Tree, Sand, and the like. And as for comparing the perception of the hand, when by the help of the ſtick it perceives the objects, with the perception of light, I confeſs that the ſenſitive perceptions do all reſemble each other, becauſe all ſenſitive parts of matter are of one degree, as being ſenſible parts, onely there is a difference according to the figures of the objects preſented to the ſenſes; and there is no better proof for perception being made by the ſenſitive motions in the body, or ſenſitive organs, but that all theſe ſenſitive perceptions are alike, and reſemble one another; for if they were not made in the body of the ſentient, but by the impreſsion of exterior objects, there would be ſo much difference betwixt them, by reaſon of the diverſity of objects, as they would have no reſemblance at all. But for a further proof of my own opinion, did the perception proceed meerly from the motion, impreſsion and reſiſtance of the objects, the hand could not perceive thoſe objects, unleſs they touched the hand it ſelf, as the ſtick doth; for it is not probable,

that

that the motions of the ſtone, water, ſand, &c. ſhould leave their bodies and enter into the ſtick, and ſo into the hand; for motion muſt be either ſomething or nothing; if ſomething, the ſtick and the hand would grow bigger, and the objects touched leſs, or elſe the touching and the touched muſt exchange their motions, which cannot be done ſo ſuddenly, eſpecially between ſolid bodies; But if motion has no body, it is nothing, and how nothing can paſs or enter or move ſome body, I cannot conceive. Tis true there is no part that can ſubſiſt ſingly by it ſelf, without dependance upon each other, and ſo parts do always joyn and touch each other, which I am not againſt; but onely I ſay perception is not made by the exterior motions of exterior parts of objects, but by the interior motions of the parts of the body ſentient. But I have diſcourſed hereof before, and ſo I take my leave, reſting,

MADAM,

Your faithful Friend

and Servant.

XXXVIII.

MADAM,

I Cannot conceive why your *Author* is ſo much for little and inſenſible parts, out of which the Elements and all other bodies are made; for though Nature is divideable, yet ſhe is alſo compoſeable; and I think there

is no need to diſſect every creature into ſuch little parts, to know their nature, but we can do it by another way as well; for we may diſſect or divide them into never ſo little parts, and yet gain never the more knowledg by it. But according to theſe principles he deſcribing amongſt the reſt the nature of Water, ſays, *That thoſe little parts, out of which Water conſiſts, are in figure ſomewhat long, light and ſlippery like little Eeles, which are never ſo cloſely joyned and entangled, but may eaſily be ſeparated.* To which I anſwer, That I obſerve the nature and figure of water to be flowing, dilating, divideable and circular; for we may ſee, in Tides, overflowings, and breaking into parts, as in rain, it will always move in a round and circular figure; And I think, if its parts were long and entangled like a knot of Eeles, it could never be ſo eaſily contracted and denced into ſnow or ice. Neither do I think, That *Salt-water hath a mixture of ſomewhat groſſer parts, not ſo apt to bend*; for to my obſervation and reaſon, the nature of ſalt-water conſiſts herein, that its circle-lines are pointed, which ſharp and pointed figure makes it ſo penetrating; yet may thoſe points be ſeparated from the circle lines of water, as it is ſeen in the making of Salt. But I am not of your *Authors* opinion, That thoſe little points do ſtick ſo faſt in fleſh, as little nails, to keep it from putrefaction, for points do not always faſten; or elſe fire, which certainly is compoſed of ſharp-pointed parts, would harden, and keep other bodies from diſſolving, whereas on the contrary, it ſeparates and divides them, although after ſeveral manners. But Putrefaction is onely a diſſolving and ſeparating of parts, after the manner of dilation; and the motion of ſalt is contracting as well as penetrating,

Of Meteor. c. 1. a. 3.

c. 3. a. 1.

penetrating, for we may obſerve, what fleſh ſoever is dry-ſalted, doth ſhrink and contract cloſe together; I will not ſay, but the pointed parts of ſalt may faſten like nayls in ſome ſorts of bodies, but not in all they work on. And this is the reaſon alſo, that Sea-water is of more weight then freſh-water, for being compoſed of points, thoſe points ſtick within each other, and ſo become more ſtrong; But yet do they not hinder the circular dilating motion of water, for the circle-lines are within, and the points without, but onely they make it more ſtrong from being divided by other exterior bodies that ſwim upon it. And this is the cauſe that Salt-water is not ſo eaſily forced or turned to vapour, as Freſh, for the points piercing into each other, hold it more *ſtrongly together*; but this is to be conſidered, that the points of ſalt are on the outſide of the watry Circle, not on the inſide, which cauſes it to be divideable from the watry Circles. I will conclude, when I have given *the reaſon, why water is ſo ſoon ſuckt up by ſand, lime*, and the like bodies, and ſay that it is the nature of all ſpongy, dry and porous bodies, meeting with liquid and pliable bodies as water, do draw and ſuck them up, like as animal Creatures being thirſty, do drink: And ſo I take my leave. and reſt.

MADAM,

Your Faithful Friend

and Servant.

MA-

XXXIX.

MADAM,

CONcerning Vapour, Clouds, Wind and Rain, I am of your *Authors* opinion, That *Water is changed into Vapour, and Vapour into Air, and that dilated Vapours make Wind, and condenſed Vapours, Clouds and Miſts*; But I am not for his little particles, *whereof*, he ſays, *Vapours are made, by the motion of a rare and ſubtil matter in the pores of terreſtrial bodies*; which certainly I ſhould conceive to be looſe atoms, did he not make them of ſeveral figures and magnitude: for, in my opinion, there are no ſuch things in nature, which like little Flyes or Bees do fly up into the air; and although I grant, that in Nature are ſeveral parts, whereof ſome are more rare, others more denſe, according to the ſeveral degrees of matter, yet they are not ſingle, but all mixt together in one body, and the change of motions in thoſe joyned parts, is the cauſe of all changes of figures whatever, without the aſsiſtance of any forreign parts: And thus Water of it ſelf is changed to Snow, Ice, or Hail, by its inherent figurative Motions, that is, the circular dilation of Water by contraction, changes into the figure of Snow, Ice, or Hail; or by rarifying motions it turns into the figure of Vapour, and this Vapour again by contracting motions into the figure of hoar-froſt; and when all theſe motions change again into the former, then the figure of Ice, Snow, Hail, Vapour and Froſt, turns again into the figure of Water;

Of Meteor. c. 2,4,5,6.

Water: And this in all ſenſe and reaſon is the moſt facil and probable way of making Ice, Snow, Hail, &c. As for rarefaction and condenſation, I will not ſay that they may be forced by forreign parts, but yet they are made by change and alteration of the inherent motions of their own parts, for though the motions of forreign parts, may be the occaſion of them, yet they are not the immediate cauſe or actors thereof. And as for *Thunder*, that clouds of Ice and Snow, the uppermoſt being condenſed by heat, and ſo made heavy, ſhould fall upon another and produce the noiſe of thunder, is very improbable; for the breaking of a little ſmall ſtring, will make a greater noiſe then a huge ſhower of ſnow with *falling*, and as for Ice being hard, it may make a great noiſe, one *part falling upon another*; but then their weight would be as much as their noiſe, ſo that the clouds or roves of Ice would be as ſoon upon our heads, if not ſooner, as the noiſe in our Eares; like as a bullet ſhot out of a Canon, we may feel the bullet as ſoon as we hear the noiſe. But to conclude, all denſations are not made by heat, nor all noiſes by preſſures, for ſound is oftener made by diviſion then preſſure, and denſation by cold then by heat: And this is all for the preſent, from,

MADAM,

Your faithful Friend,

and Servant.

MA-

XL.

MADAM,

I Cannot perceive the Rational Truth of your *Authors* opinion, concerning *Colours*, made *by the agitation of little ſpherical bodies of an Æthereal matter, tranſmitting the action of Light*; for if colours were made after this manner, there would, in my opinion, not be any fixed or laſting colour, but one colour would be ſo various, and change faſter then every minute; the truth is, there would be no certain or perfect colour at all: wherefore it ſeems altogether *improbable*, that ſuch liquid, rare and diſunited bodies ſhould either keep or make inherent and fixed colours; for liquid and rare bodies, whoſe ſeveral parts are united into one conſiderable bulk of body, their colours are more apt to change then the colours of thoſe bodies that are dry, ſolid and denſe; the reaſon is, that rare and liquid bodies are more looſe, ſlack, and agil, then ſolid and dry bodies, in ſo much, as in every alteration of motion their colours are apt to change: And if united rare and liquid bodies be ſo apt to alter and change, how is it probable, that thoſe bodies, which are ſmall and not united, ſhould either keep or make inherent fixed colours? I will not ſay, but that ſuch little bodies may range into ſuch lines and figures, as make colours, but then they cannot laſt, being not united into a laſting body, that is, into a ſolid ſubſtantial body, proper to make ſuch figures as colours. But I deſire

you

you not to miſtake me, *Madam*, for I do not mean, that the ſubſtance of colours is a groſs thick ſubſtance, for the ſubſtance may be as thin and rare as flame or light, or in the next degree to it; for certainly the ſubſtance of light, and the ſubſtance of colours come in their degrees very neer each other; But according to the contraction of the figures, colours are paler or deeper, or more or leſs laſting. And as for the reaſon, why colours will change and rechange, it is according as the figures alter or recover their forms; for colours will be as animal Creatures, which ſometimes are faint, pale, and ſick, and yet recover; but when as a particular colour is, as I may ſay, quite dead, then there is no recovering of it. But colours may ſeem altered ſometimes in our eyes, and yet not be altered in themſelves; for our eyes, if perfect, ſee things as they are preſented; and for proof, if any animal ſhould be preſented in an unuſual poſture or ſhape, we could not judg of it; alſo if a Picture, which muſt be viewed ſide-wards, ſhould be looked upon forwards, we could not know what to make of it; ſo the figures of colours, if they be not placed rightly to the ſight, but turned topſie-turvie as the Phraſe is, or upſide-down, or be moved too quick, and this quick motion do make a confuſion with the lines of Light, we cannot poſsibly ſee the colour perfectly. Alſo ſeveral lights or ſhades may make colours appear otherwiſe then in themſelves they are, for ſome ſorts of lights and ſhades may fall upon the ſubſtantial figures of colours in ſolid bodies, in ſuch lines and figures, as they may over-power the natural or artificial inherent colours in ſolid bodies, and for a time make other colours, and many times the lines of light or

of ſhadows will meet and ſympathize ſo with inherent colours, and place their lines ſo exactly, as they will make thoſe inherent colours more ſplendorous then in their own nature they are, ſo that light and ſhadows will add or diminiſh or alter colours very much. Likewiſe ſome ſorts of colours will be altered to our ſight, not by all, but onely by ſome ſorts of *light*, as for example, blew will ſeem green, and green blew by candle light, when as other colours will never appear changed, but ſhew conſtantly as they are; the reaſon is, becauſe the lines of candle light fall in ſuch figures upon the inherent colours, and ſo make them appear according to their own figures; Wherefore it is onely the alteration of the exterior figures of light and ſhadows, that make colours appear *otherwiſe, and not* a change of their own natures; And hence we may rationally conclude, that ſeveral lights and ſhadows by their ſpreading and dilating lines may alter the face or out-ſide of colours, but not ſuddenly change them, unleſs the power of heat, and continuance of time, or any other cauſe, do help and aſsiſt them in that work of metamorphoſing or transforming of colours; but if the lines of light be onely, as the phraſe is, Skin-deep; that is, but lightly ſpreading and not deeply penetrating, they may ſoon wear out or be rubbed of; for though they hurt, yet they do not kill the natural colour, but the colour may recover and reaſſume its former vigour and luſtre: but time and other accidental cauſes will not onely alter, but deſtroy particular colours as well as other creatures, although not all after the ſame manner, for ſome will laſt longer then others. And thus, *Madam*, there are three

ſorts

ſorts of Colours, Natural, Artificial, and Accidental; but I have diſcourſed of this ſubject more at large in my Philoſophical Opinions, to which I refer you, and reſt,

MADAM,

Your faithful Friend

and Servant.

XLI.

MADAM,

MY anſwer to your *Authors* queſtion, *Why flame aſcends in a pointed figure?* is, That the figure of fire conſiſts in points, and being dilated into a flame, it aſcends in lines of points ſlope-wayes from the fired fuel; like as if you ſhould make two or more ſticks ſtand upright and put the upper ends cloſe together, but let the lower ends be aſunder; in which poſture they will ſupport each other, which, if both their ends were cloſe together, they could not do. *P. 4. art. 9.*

The ſecond queſtion is, *Why fire doth not alwayes flame?* I anſwer, Becauſe all fuel is not flameable, ſome being ſo moiſt, as it doth oppoſe the fires dryneſs, and ſome ſo hard and retentive, as fire cannot ſo ſoon diſſolve it; and in this conteſt, where one diſſipates, and the other retains, a third figure is produced, *viz.* ſmoak, between the heat of one, and the moiſture of the other; *Art. 107.*

and this ſmoak is forced by the fire out of the fuel, and is nothing elſe but certain parts of fuel, raiſed to ſuch a degree of rarefaction; and if fire come near, it forces the ſmoak into flame, the ſmoak changing it ſelf by its figurative motions into flame; but when ſmoak is above the flame, the flame cannot force the ſmoak to fire or enkindle it ſelf, for the flame cannot ſo well encounter it; which ſhews, as if ſmoak had a ſwifter motion then flame, although flame is more rarified then ſmoak; and if moiſture predominate, there is onely ſmoak, if fire, then there is flame: But there are many figures, that do not flame, until they are quite diſſolved, as Leather, and many other things. Neither can fire work upon all bodies alike, but according to their ſeveral natures, like as men cannot encounter ſeveral ſorts of creatures after one and the ſame manner; for not any part in nature hath an abſolute power, although it hath ſelf-motion; and this is the reaſon, that wax by fire is melted, and clay hardened. The third queſtion is, *Why ſome few drops of water ſprinkled upon fire, do encreaſe its flame?* I anſwer, by reaſon of their little quantity, which being over-powred by the greater quantity and force of fire, is by its ſelf-motions converted into fire; for water being of a rare nature, and fire, for the moſt part, of a rarifying quality, it cannot ſuddenly convert it ſelf into a more ſolid body then its nature is, but following its nature by force it turns into flame. The fourth queſtion is, *Why the flame of ſpirit of Wine doth conſume the Wine, and yet cannot burn or hurt a linnen cloth?* I anſwer, The Wine is the fuel that feeds the flame, and upon what it feeds, it devoureth, and with the food, the feeder; but by reaſon Wine is a rarer

body

body then Oyle, or Wood, or any other fuel, its flame is alſo weaker. And thus much of theſe queſtions; I reſt,

MADAM,

Your Faithful Friend

and Servant.

XLII.

MADAM,

TO conclude my diſcourſe upon the Opinions of theſe two famous and learned Authors, which I have hitherto ſent you in ſeveral Letters, I could not chuſe but repeat the ground of my own opinions in this preſent; which I deſire you to obſerve well, leſt you miſtake any thing, whereof I have formerly diſcourſed. First I am for ſelf-moving matter, which I call the ſenſitive and rational matter, and the perceptive and architectonical part of nature, which is the life and knowledg of nature. Next I am of an opinion, That all Perception is made by corporeal, figuring ſelf-motions, and that the perception of forreign objects is made by patterning them out: as for example, The ſenſitive perception of forreign objects is by making or taking copies from theſe objects, ſo as the ſenſitive corporeal motions in the eyes copy out the objects of ſight, and the ſenſitive corporeal motions in the ears copy out the objects of ſound; the ſenſitive corporeal motions in the noſtrils,

copy

copy out the objects of ſent; the ſenſitive corporeal motions in the tongue and mouth, copy out the objects of taſte, and the ſenſitive corporeal motions in the fleſh and skin of the body copy out the forreign objects of touch; for when you ſtand by the fire, it is not that the fire, or the heat of the fire enters your fleſh, but that the ſenſitive motions copy out the objects of fire and heat. As for my Book of Philoſophy, I muſt tell you, that it treats more of the production and architecture of Creatures then of their perceptions, and more of the cauſes then the effects, more in a general then peculiar way, which I thought neceſſary to inform you of, and ſo I remain,

MADA

Your faithful Friend

and Servant.

XLIII.

MADAM,

I Received your queſtions in your laſt: the firſt was, *Whether there be more body compact together in a heavy then in a light thing?* I anſwer, That purity, rarity, little quantity, exteriour ſhape, as alſo motion cauſe lightneſſe; and groſſneſs of bulk, denſity, much quantity, exterior figure and motion cauſe heavineſs, as it may be confirmed by many examples: but lightneſs and heavineſs are onely conceptions

tions of man, as alſo aſcent and deſcent; and it may be queſtioned, whether there be ſuch things really in nature; for change of motions of one and the ſame body will make lightneſs, and heavineſs, as alſo rarity and denſity: beſides, the ſeveral figures and compoſitions of bodies will cauſe them to aſcend or deſcend, for Snow is a light body and yet deſcends from the clouds, and Water is a heavie body, and yet aſcends in ſprings out of the Earth; Duſt is a denſe body and yet is apt to aſcend, Rain or Dew is a rare body and yet is apt to deſcend; Alſo a Bird aſcends by his ſhape, and a ſmall worm although of leſs body and lighter will fall down; and there can be no other prof of light and heavy bodies but by their aſcent and deſcent; But as really there is no ſuch thing as heavie or light in nature more then words, and compariſons of different corporeal motions, ſo there is no ſuch thing, as high or low, place or time, but onely words to make compariſons and to diſtinguiſh different corporeal motions. The ſecond queſtion was, *When a Baſon with water is waſted into ſmoak, which fills up a whole Room, Whether the air in the room doth, as the ſenſitive motions of the eye; pattern out the figure of the ſmoak; or whether all the room is really fill'd with the vapour or ſmoak?* I anſwer, If it be onely the pattern or figure of ſmoak or vapour, the extenſion and dilation is not ſo much as man imagines; but why may not the air, which in my opinion hath ſelf-motion, pattern out the figure of ſmoak as well as the eye? for that the eye ſurely doth it, may be proved, becauſe ſmoak, if it enter the eye, makes it not onely ſmart and water much, but blinds it quite for the preſent; wherefore ſmoak doth not enter the eye, when the eye ſeeth it, but

the eye patterns out the figure of ſmoak, and this is perception; In the ſame manner may the air pattern out the figure of ſmoak. The third queſtion was, *Whether all that they name qualities of bodies, as thickneſs, thinneſs, hardneſs, ſoftneſs, gravity, levity, tranſparentneſs and the like, be ſubſtances?* I anſwer, That all thoſe, they call qualities, are nothing elſe but change of motion and figure of the ſame body, and ſeveral changes of motions are not ſeveral bodies, but ſeveral actions of one body; for change of motion doth not create new matter or multiply its quantity: for though corporeal motions may divide and compoſe, contract and dilate, yet they cannot create new matter, or make matter any otherwiſe then it is by nature; neither can they add or ſubſtract any thing from its nature. And therefore my opinion is, not that they are things ſubſiſting by themſelves without matter, but that there can no abſtraction be made of motion and figure from matter, and that matter and motion being but one thing and inſeparable, make but one ſubſtance. Wherefore denſity and rarity, gravity and levity, *&c.* being nothing elſe but change of motions, cannot be without matter, but a denſe or rare, heavie or light matter is but one ſubſtance or body; And thus having obeyed your commands, I reſt,

MADAM,

Your faithful Friend,

and Servant.

XLIV

MADAM,

I Am very ready to give you my opinion of thoſe two queſtions you ſent me, whereof the firſt was, *Whether that, which is rare and ſubtil, be not withal pure?* To which I anſwer, That all rare bodies are not ſubtil, nor pure, and that all which is denſe is not groſs and dull: As for example, Puddle-water, or alſo clear water, is rarer then Quickſilver, and yet not ſo ſubtil and pure as Quickſilver; the like of Gold; for Quickſilver and Gold may be rarified to a tranſparentneſs, and yet be ſo denſe, as not to be eaſily diſſolved; and Quickſilver is very ſubtil and ſearching, ſo as to be able to force other bodies to divide as well as it can divide and compoſe its own parts. Wherefore my opinion is, that the pureſt and ſubtileſt degree of matter in nature, is that degree of matter which can dilate and contract, compoſe and divide into any figure by corporeal ſelf-motion. Your ſecond queſtion was, *Why a man's hand cannot break a little hard body, as a little nail, whereas yet it is bigger then the nail?* I anſwer, It is not becauſe the hand is ſofter then the nail, for one hard body will not break ſuddenly another hard body, and a man may eaſily break an iron nail with his hand, as I have bin informed; but it is ſome kind of motion which can eaſier do it, then another: for I have ſeen a ſtrong cord wound about both a man's hands, who pulled his hands as hard and ſtrongly aſunder as he could, and yet was

not

not able to break it; when as a Youth taking the ſame cord, and winding it about his hands as the former did, immediately broke it; the cauſe was, that he did it with another kind of motion or pulling, then the other did, which though he uſed as much force and ſtrength, as he was able, yet could not break it, when the boy did break it with the greateſt eaſe, and turning onely his hands a little, which ſhews, that many things may be done by a ſlight of motion, which otherwiſe a great ſtrength and force cannot do. This is my anſwer and opinion concerning your propoſed queſtions; if you have any more, I ſhall be ready to obey you, as,

MADAM,

Your faithful Friend

and humble Servant.

XLV

MADAM,

I underſtand by your laſt, that you are very deſirous to know, *Whether there be not in nature ſuch animal creatures both for purity and ſize, as we are not capable to perceive by our ſight.* Truly, *Madam,* in my opinion it is very probable there may be animal creatures of ſuch rare bodies as are not ſubject to our exterior ſenſes, as well, as there are elements which are not ſubject to all our exterior ſenſes: as for example, fire is onely ſubject to our ſight and feeling, and not to any other

ſenſe;

ſenſe, water is ſubject to our ſight, taſte, touch and hearing, but not to ſmelling; and earth is ſubject to our ſight, taſte, touch and ſmelling, but not to our hearing; and vapour is onely ſubject to our ſight, and wind onely to our hearing; but pure air is not ſubject to any of our ſenſes, but onely known by its effects: and ſo there may likewiſe be animal creatures which are not ſubject to any of our ſenſes both for their purity and life; as for example, I have ſeen pumpt out of a water pump ſmall worms which could hardly be diſcerned but by a bright Sun-light, for they were ſmaller then the ſmalleſt hair, ſome of a pure ſcarlet colour and ſome white, but though they were the ſmalleſt creatures that ever I did ſee, yet they were more agil and fuller of life, then many a creature of a bigger ſize, and ſo ſmall they were, as I am confident, they were neither ſubject to taſt, ſmell, touch nor hearing, but onely to ſight, and that neither without dificulty, requiring both a ſharp ſight and a clear light to perceive them; and I do verily believe that theſe ſmall animal creatures may be great in compariſon to others which may be in nature. But if it be probable that there may be ſuch ſmall animal creatures in nature, as are not ſubject to our exterior ſenſes, by reaſon of their littleneſs; it is alſo probable, that there may be ſuch great and big animal creatures in nature as are beyond the reach and knowledg of our exterior ſenſes; for bigneſs and ſmallneſs are not to be judged by our exterior ſenſes, onely; but as ſenſe and reaſon inform us, that there are different degrees in Purity and Rarity, ſo alſo in ſhapes, figures and ſizes in all natural creatures. Next you deſired to know, *Whether there can be an artificial Life, or a Life made by Art?*

My anſwer is, Not; for although there is Life in all natures parts, yet not all the parts are life, for there is one part of natural matter which in its nature is inanimate or without life, and though natural Life doth produce Art, yet Art cannot produce natural Life, for though Art is the action of Life, yet it is not Life it ſelf: not but that there is Life in Art, but not art in life, for Life is natural, and not artificial; and thus the ſeveral parts of a watch may have ſenſe and reaſon according to the nature of their natural figure, which is ſteel, but not as they have an artificial ſhape, for Art cannot put Life into the watch, Life being onely natural, not artificial. Laſtly your deſire was to know, *Whether a part of matter may be ſo ſmall, as it cannot be made leſs?* I anſwer, there is no ſuch thing in nature as biggeſt or leaſt, nature being Infinite as well in her actions as in her ſubſtance; and I have mentioned in my book of Philoſophy, and in a letter, I ſent you heretofore concerning Infinite; that there are ſeveral ſorts of Infinites, as Infinite in quantity or bulk, Infinite in number, Infinite in quality, as Infinite degrees of hardneſs, ſoftneſs, thickneſs, thinneſs, ſwiftneſs, ſlowneſs, *&c.* as alſo Infinite compoſitions, diviſions, creations, diſſolutions, *&c.* in nature; and my meaning is, that all theſe Infinite actions do belong to the Infinite body of nature, which being infinite in ſubſtance muſt alſo of neceſsity be infinite in its actions; but although theſe Infinite actions are inherent in the power of the Infinite ſubſtance of nature, yet they are never put in act in her parts, by reaſon there being contraries in nature, and every one of the aforementioned actions having its oppoſite, they do hinder and obſtruct each other ſo, that none can actually

actually run into infinite; for the Infinite degrees of compoſitions hinder the infinite degrees of diviſions; and the infinite degrees of rarity, ſoftneſs, ſwiftneſs, *&c.* hinder the infinite degrees of denſity, hardneſs, ſlowneſs, *&c.* all which nature has ordered with great wiſdom and Prudence to make an amiable combination between her parts; for if but one of theſe actions ſhould run into infinite, it would cauſe a horrid confuſion between natures parts, nay an utter deſtruction of the whole body of nature, if I may call it whole: as for example, if one part ſhould have infinite compoſitions, without the hinderance or obſtruction of diviſion, it would at laſt mount and become equal to the Infinite body of nature, and ſo from a part change to a whole, from being *finite to infinite*, which is impoſsible; Wherefore, though nature hath an Infinite natural power, yet ſhe doth not put this power in act in her particulars; and although ſhe has an infinite force or ſtrength, yet ſhe doth not uſe this force or ſtrength *in* her parts. Moreover when I ſpeak of Infinite diviſions and compoſitions, creations and diſſolutions, *&c.* in nature, I do not mean ſo much the infinite degrees of compoſitions and diviſions, as the actions themſelves to be infinite in number; for there being infinite parts in nature, and every one having its compoſitions and diviſions, creations and diſſolutions, theſe actions muſt of neceſſity be infinite too, to wit, in number, according to the Infinite number of parts, for as there is an Infinite number of parts in nature, ſo there is alſo an infinite number and variety of motions which are natural actions. However let there be alſo infinite degrees of theſe natural actions, in the body or ſubſtance of infinite

nature;

nature; yet, as I ſaid, they are never put in act, by reaſon every action hath its contrary or oppoſite, which doth hinder and obſtruct it from running actually into infinite. And thus I hope, you conceive cleerly now, what my opinion is, and that I do not contradict my ſelf in my works, as ſome have falſly accuſed me, for they by miſapprehending my meaning, judge not according to the truth of my ſenſe, but according to their own falſe interpretation, which ſhews not onely a weakneſs in their underſtandings and paſsions, but a great injuſtice and injury to me, which I deſire you to vindicate when ever you chance to hear ſuch accuſations and blemiſhes laid upon my works, by which you will Infinitely oblige,

MADAM;

Your humble and faithful Servant.

SECT. II.

I.

MADAM,

BEing come now to the Peruſal of the Works of that learned *Author* Dr. *Moor*, I find that the onely deſign of his Book called *Antidote*, is *to prove the Exiſtence* of a God, and to refute, or rather convert Atheiſts; which I wonder very much at, conſidering, he ſays himſelf, * That *there is no man under the cope of Heaven but believes a God*; which if ſo, what needs there to make ſo many arguments to no purpoſe? unleſs it be to ſhew Learning and wit; In my opinion, it were better to convert Pagans to be Chriſtians, or to reform irregular Chriſtians to a more pious life, then to prove that, which all men believe, which is the way to bring it into queſtion. For certainly, according to the natural Light of Reaſon, there is a God, and no man, I believe, doth doubt it; for though

* *Antidote*, Book 1. c. 10. a. 5.

there may be many vain words, yet I think there is no ſuch atheiſtical belief amongſt man-kind, nay, not onely amongſt men, but alſo, amongſt all other creatures, for if nature believes a God, all her parts, eſpecially the ſenſitive, and rational, which are the living and knowing parts, and are in all natural creatures, do the like, and therefore all parts and creatures in nature do adore and worſhip God, for any thing man can know to the contrary; for no queſtion, but natures ſoule adores and worſhips God as well as man's ſoule; and why may not God be worſhipped by all ſorts and kinds of creatures as well, as by one kind or ſort? I will not ſay the ſame way, but I believe there is a general worſhip and adoration of God; for as God is an *Infinite* Deity, ſo certainly he has an *Infinite Worſhip* and *Adoration*, and there is not any part of nature, but adores and worſhips the only omnipotent God, to whom belongs Praiſe and Glory from and to all eternity: For it is very improbable, that God ſhould be worſhipped onely in part, and not in whole, and that all creatures were made to obey man, and not to worſhip God, onely for man's ſake, and not for God's worſhip, for man's uſe, and not God's adoration, for mans ſpoil and not God's bleſsing: But this Preſumption, Pride, Vain-glory and Ambition of man, proceeds from the irregularity of nature, who being a ſervant, is apt to commit errors; and cannot be ſo abſolute and exact in her devotion, adoration and worſhip, as ſhe ought, nor ſo well obſervant of God: as God is obſerving her: Nevertheleſs, there is not any of her parts or creatures, that God is not acknowledged by, though not ſo perfectly as he ought, which is cauſed by the irregularities of nature, as I ſaid before.

And ſo God of his mercy have mercy upon all Creatures; To whoſe protection I commend your Ladiſhip, and reſt,

MADAM,

Your faithful Friend

and Servant.

II.

MADAM;

SInce I ſpake in my laſt of the adoration and worſhip of God, you would faine know, whether we can have an Idea of God? I anſwer, That naturally we may, and really have a knowledge of the exiſtence of God, as I proved in my former letter, to wit, that there is a God, and that he is the *Author* of all things, who rules and governs all things, and is alſo the God of Nature: but I dare not think, that naturally we can have an Idea of the eſſence of God, ſo as to know what God is in his very nature and eſſence; for how can there be a finite Idea of an Infinite God? You may ſay, As well as of Infinite ſpace. I anſwer, Space is relative, or has reſpect to body, but there is not any thing that can be compared to God; for the Idea of Infinite nature is material, as being a material creature of Infinite material Nature. You will ſay, How can a finite part have an Idea of infinite nature? I anſwer, Very well, by reaſon the Idea is part of Infinite Nature, and

ſo

ſo of the ſame kind, as material; but God being an Eternal, Infinite, Immaterial, Individable Being, no natural creature can have an Idea of him. You will ſay, That the Idea of God in the mind is immaterial; I anſwer, I cannot conceive, that there can be any immaterial Idea in nature; but be it granted, yet that Immaterial is not a part of God, for God is individable, and hath no parts; wherefore the Mind cannot have an Idea of God, as it hath of Infinite nature, being a part of nature; for the Idea of God cannot be of the eſſence of God, as the Idea of nature is a corporeal part of nature: and though nature may be known in ſome parts, yet God being Incomprehenſible, his Eſſence can by no wayes or means be naturally known; and this is conſtantly believed, by

MADAM,

Your faithful Friend,

and Servant.

III.

MADAM,

ALthough I mentioned in my laſt, that it is impoſſible to have an Idea of God, yet your *Author* is pleaſed to ſay, That *he will not ſtick to affirm, that the Idea or notion of God is as eaſie as any notion elſe whatſoever, and that we may know as much of him as of any thing elſe in the world.* To which I anſwer, That

Of the Immortality of the Soul, l. 1. c. 4.

in my opinion; God is not ſo eaſily to be known by any creature, as man may know himſelf; nor his attributes ſo well, as man can know his own natural proprieties: for Gods Infinite attributes are not conceivable, and cannot be comprehended by a finite knowledg and underſtanding, as a finite part of nature; for though nature's parts may be Infinite in number, and as they have a relation to the Infinite whole, if I may call it ſo, which is Infinite nature, yet no part is infinite in it ſelf, and therefore it cannot know ſo much as whole nature: and God being an Infinite Deity, there is required an Infinite capacity to conceive him; nay, Nature her ſelf although Infinite, yet cannot poſibly have an exact notion of God, by reaſon of the diſparity between God and her ſelf; and therefore it is not probable, if the Infinite ſervant of God is not able to conceive him, that a finite part or creature of nature, of what kind or ſort ſoever, whether Spiritual, as your *Author* is pleaſed to name it, or Corporeal, ſhould comprehend God. Concerning my belief of God, I ſubmit wholly to the Church, and believe as I have bin informed out of the *Athanaſian* Creed, that the Father is Incomprehenſible, the Sonne Incomprehenſible, and the Holy Ghoſt Incomprehenſible; and that there are not three, but one Incomprehenſible God; Wherefore if any man can prove (as I do verily believe he cannot) that God is not Incomprehenſible, he muſt of neceſsity be more knowing then the whole Church, however he muſt needs diſſent from the Church. But perchance your *Author* may ſay, I raiſe new and prejudicial opinions, in ſaying that matter is eternal. I anſwer, The Holy Writ doth not mention Matter to be created, but onely Particular

Creatures, as this Viſible World, with all its Parts, as the hiſtory or deſcription of the Creation of the World in *Geneſis* plainly ſhews; For *God ſaid, Let it it be Light, and there was Light; Let there be a Firmament in the midſt of the Waters, and let it divide the Waters from the Waters; and Let the Waters under the Heaven be gathered together unto one place, and let the dry Land appear; and let the Earth bring forth Graſs, the Herb yielding Seed, and the Fruit-tree yielding Fruit after his kind; and let there be Lights in the Firmament of the Heaven, to divide the Day from the Night,* &c. Which proves, that all creatures and figures were made and produced out of that rude and deſolate heap or chaos which the Scripture mentions, which is nothing elſe but matter, by the powerful Word and Command of God, executed by his Eternal Servant, Nature; as I have heretofore declared it in a Letter I ſent you in the beginning concerning Infinite Nature. But leaſt I ſeem to encroach too much upon Divinity, I ſubmit this Interpretation to the Church; However, I think it not againſt the ground of our Faith; for I am ſo far from maintaining any thing either againſt Church or State, as I am ſubmitting to both in all duty, and ſhall do ſo as long as I live, and reſt,

MADAM,

Your Faithful Friend

and Servant.

IV.

MADAM,

SInce your *Worthy* and *Learned Author* is pleaſed to mention, That an *ample experience both of Men and Things doth enlarge our Underſtanding*, I have taken occaſion hence to enquire, how a mans Underſtanding may be encreaſed or inlarged. The Underſtanding muſt either be in Parts, or it muſt be Individable as one; if in Parts, then there muſt be ſo many Underſtandings as there are things underſtood; but if *Individable*, and but one Underſtanding, then it muſt dilate it ſelf upon ſo many ſeveral objects. I for my part, aſſent to the firſt, That Underſtanding increaſes by Parts, and not by Dilation, which Dilation muſt needs follow, if the Mind or Underſtanding of man be *Indiviſible* and without parts; but if the Mind or Soul be Individable, then I would fain know, how Underſtanding, Imagination, Conception, Memory, Remembrance, and the like, can be in the mind? You will ſay, perhaps; they are ſo many faculties or properties of the Incorporeal Mind, but, I hope, you do not intend to make the Mind or Soul a Deity, with ſo many attributes, Wherefore, in my opinion, it is ſafer to ſay, That the Mind is compoſed of ſeveral active Parts: but of theſe Parts I have treated in my Philoſophy, where you will find, that all the ſeveral Parts of Nature are Living and Knowing, and that there is no part that has not Life and Knowledg, being all compoſed

Antid. Book. 2. Ch. 2. a. 1.

of rational and ſenſitive matter, which is the life and ſoul of Nature; and that Nature being Material, is compoſable and dividable, which is the cauſe of ſo many ſeveral Creatures, where every Creature is a part of Nature, and theſe Infinite parts or creatures are Nature her ſelf; for though Nature is a ſelf-moving ſubſtance, and by ſelf-motion divides and compoſes her ſelf ſeveral manners or ways into ſeveral forms and figures, yet being a knowing, as well as a living ſubſtance, ſhe knows how to order her parts and actions wiſely; for as ſhe hath an Infinite body or ſubſtance, ſo ſhe has an Infinite life and knowledg; and as ſhe hath an Infinite life and knowledg, ſo ſhe hath an infinite wiſdom: But miſtake me not, *Madam*; I do not mean an Infinite Divine Wiſdom, but an Infinite Natural Wiſdom, given her by the Infinite bounty of the Omnipotent God; but yet this Infinite Wiſdom, Life and Knowledg in Nature make but one Infinite. And as Nature hath degrees of matter, ſo ſhe has alſo degrees and variety of corporeal motions; for ſome parts of matter are ſelf-moving, and ſome are moved by theſe ſelf-moving parts of matter; and all theſe parts, both the moving and moved, are ſo intermixed, that none is without the other, no not in any the leaſt Creature or part of Nature we can conceive; for there is no Creature or part of Nature, but has a comixture of thoſe mentioned parts of animate and inanimate matter, and all the motions are ſo ordered by Natures wiſdom, as not any thing in Nature can be otherwiſe, unleſs by a Supernatural Command and Power of God; for no part of corporeal matter and motion can either periſh, or but reſt; one part may cauſe another part to alter its motions, but not to quit

motion, no more then one part of matter can annihilate or deſtroy another; and therefore matter is not meerly Paſsive, but always Active, by reaſon of the thorow mixture of animate and inanimate matter; for although the animate matter is onely active in its nature, and the inanimate paſsive, yet becauſe they are ſo cloſely united and mixed together that they make but one body, the parts of the animate or ſelf-moving matter do bear up and cauſe the inanimate parts to move and work with them; and thus there is an activity in all parts of matter moving and working as one body, without any fixation or reſt, for all is moveable, moving and moved. All which, *Madam*, if it were well obſerved, there would not be ſo many ſtrange opinions concerning nature and her actions, making the pureſt and ſubtilleſt part of matter immaterial or incorporeal, which is as much, as to extend her beyond nature, and to rack her quite to nothing. But I fear the opinion of Immaterial ſubſtances in Nature will at laſt bring in again the Heathen Religion, and make us believe a god *Pan*, *Bacchus*, *Ceres*, *Venus*, and the like, ſo as we may become worſhippers of Groves and ſhadows, Beans and Onions, as our Forefathers. I ſay not this, as if I would aſcribe any worſhip to Nature, or make her a Deity, for ſhe is onely a ſervant to God, and ſo are all her parts or creatures, which parts or creatures, although they are transformed, yet cannot be annihilated, except Nature her ſelf be annihilated, which may be, whenſoever the Great God pleaſes; for her exiſtence and reſolution, or total deſtruction, depends upon Gods Will and Decree, whom ſhe fears, adores, admires, praiſes and prayes unſto, as being her God and Maſter; and as ſhe adores

God, ſo do all her parts and creatures, and amongſt the reſt Man, ſo that there is no Atheiſt in Infinite Nature, at leaſt not in the opinion of,

MADAM,

Your faithful Friend

and Servant.

V.

MADAM,

Antid. Book, 2. c. 2.

I Cannot well conceive what your *Author* means by the *Common Laws of Nature*; But if you deſire my opinion how many Laws Nature hath, and what they are; I ſay Nature hath but One Law, which is a wiſe Law, *viz.* to keep Infinite matter in order, and to keep ſo much Peace, as not to diſturb the Foundation of her Government: for though Natures actions are various, and ſo many times oppoſite, which would ſeem to make wars between ſeveral Parts, yet thoſe active Parts, being united into one Infinite body, cannot break Natures general Peace; for that which Man names War, Sickneſs, Sleep, Death, and the like, are but various particular actions of the onely matter; not as your *Author* imagines, in a confuſion, like Bullets, or ſuch like things juggled together in a mans Hat, but very orderly and methodical: And the Playing motions of nature are the actions of Art, but her ſerious actions are the actions of Production, Generation and Tranſ-

formation

formation in ſeveral kinds, ſorts and particulars of her Creatures, as alſo the action of ruling and governing theſe her ſeveral active Parts. Concerning the Pre-eminence and Prerogative of *Man*, whom your *Author* calls * *The flower and chief of all the products of nature upon this Globe of the earth*; I anſwer, That Man cannot well be judged of himſelf, becauſe he is a Party, and ſo may be Partial; But if we obſerve well, we ſhall find that the Elemental Creatures are as excellent as Man, and as able to be a friend or foe to Man, as Man to them, and ſo the reſt of all Creatures; ſo that I cannot perceive more abilities in Man then in the reſt of natural Creatures; for though he can build a ſtately Houſe, yet he cannot make a Honey-comb; and though he can plant a Slip, yet he cannot make a Tree; though he can make a Sword, or Knife, yet he cannot make the Mettal. And as Man makes uſe of other Creatures, ſo other Creatures make uſe of Man, as far as he is good for any thing: But Man is not ſo uſeful to his neighbour or fellow-creatures, as his neighbour or fellow-creatures to him, being not ſo profitable for uſe, as apt to make ſpoil. And ſo leaving him, I reſt,

MADAM,

Your faithful Friend

and Servant.

MA-

VI.

MADAM,

YOur *Author* demands, *Whether there was ever any man, that was not mortal, and whether there be any mortal that had not a beginning?* Truly, if nature be eternal, all the material figures which ever were, are, and can be, muſt be alſo eternal in nature; for the figures cannot be annihilated, unleſs nature be deſtroyed; and although a Creature is diſſolved and tranſformed into numerous different figures, yet all theſe ſeveral figures remain ſtill in thoſe parts of matter, whereof that creature was made, for matter never changes, but is always one and the ſame, and figure is nothing elſe but matter tranſpoſed or transformed by motion ſeveral modes or ways. But if you conceive Matter to be one thing, Figure another, and Motion a third, ſeveral, diſtinct and dividable from each other, it will produce groſs errors, for, matter, motion, and figure, are but one thing. And as for that common queſtion, whether the Egg was before the Chick, or the Chick before the Egg, it is but a thred-bare argument, which proves nothing, for there is no ſuch thing as Firſt in Eternity, neither doth Time make productions or generations, but Matter; and whatſoever matter can produce or generate, was in matter before it was produced; wherefore the queſtion is, whether Matter, which is Nature, had a beginning, or not? I ſay not: for put the caſe, the figures of Earth, Air, Water, and Fire,

Antid. l. 3. c. 15.

Light

Light and Colours, Heat and Cold, Animals, Vegetables and Minerals, *&c.* were not produced from all Eternity, yet thoſe figures have nevertheleſs been in Matter, which is Nature, from all eternity, for theſe mentioned Creatures are onely made by the corporeal motions of Matter, transforming Matter into ſuch ſeveral figures; Neither can there be any periſhing or dying in Nature, for that which Man calls ſo, is onely an alteration of Figure. And as all other productions are but a change of Matters ſenſitive motions, ſo all irregular and extravagant opinions are nothing but a change of Matters rational motions; onely productions by *rational* motions are interior, and thoſe by ſenſitive motions *exterior.* For the Natural Mind is not leſs material then the body, onely the Matter of the Mind is much purer and ſubtiller then the Matter of the Body. And thus there is nothing in Nature but what is material; but he that thinks it abſurd to ſay, the World is compoſed of meer ſelf-moving Matter, may conſider, that it is more abſurd to believe Immaterial ſubſtances or ſpirits in Nature, as alſo a ſpirit of Nature, which is the Vicarious power of God upon Matter; For why ſhould it not be as probable, that God did give Matter a ſelf-moving power to her ſelf, as to have made another Creature to govern her? For Nature is not a Babe, or Child, to need ſuch a Spiritual Nurſe, to teach her to go, or to move; neither is ſhe ſo young a Lady as to have need of a Governeſs, for ſurely ſhe can govern her ſelf; ſhe needs not a Guardian for fear ſhe ſhould run away

with a younger Brother, or one that cannot make her a Jointure. But leaving thoſe ſtrange opinions to the fancies of their Authors, I'le add no more, but that I am,

MADAM,

Your faithful Friend,

and Servant.

VII.

MADAM,

YOur *Author* being very earneſt in arguing againſt thoſe that maintain the opinion of Matter being ſelf-moving, amongſt the reſt of his arguments brings in this: *Suppoſe*, ſays he, *Matter could move it ſelf, would meer Matter with ſelf-motion amount to that admirable wiſe contrivance of things which we ſee in the World?—All the evaſion I can imagine, our adverſaries may uſe here, will be this: That Matter is capable of ſenſe, and the fineſt and moſt ſubtil of the moſt refined ſenſe; and conſequently of Imagination too, yea happily of Reaſon and Underſtanding.* I anſwer, it is very probable, that not onely all the Matter in the World or Univerſe hath Senſe, but alſo Reaſon; and that the ſenſitive part of matter is the builder, and the rational the deſigner; whereof I have ſpoken before, and you may find more of it in my Book of Philoſophy. But, ſays your Author, *Let us ſee, if all their heads laid together*

Of the Immortality of the Soul, l. 1. c. 12.

together can contrive the anatomical Fabrick of any Creature that liveth? I anſwer, all parts of Nature are not bound to have heads or tayls; but if they have, ſurely they are wiſer then many a man's. *I demand*, ſays he, *Has every one of theſe Particles, that muſt have a hand in the framing of the body of an animal, the whole deſign of the work by the Impreſs of ſome Phantaſme upon it? or as they have ſeveral offices, ſo have they ſeveral parts of the deſign?* I anſwer, All the actions of ſelf-moving Matter are not Impreſſes, nor is every part a hand-labourer, but every part unites by degrees into ſuch or ſuch a Figure. Again, ſays he, *How is it conceiveable that any one Particle of Matter, or many together, (there not exiſting, yet in Nature an animal) can have the Idea Impreſſed of that Creature they are to frame?* I anſwer, all figures whatſoever have been, are, or can be in Nature, are exiſtent in nature. *How*, ſays he, *can they in framing ſeveral parts confer notes? by what language or ſpeech can they communicate their Counſels one to another?* I anſwer, Knowledg doth not always require ſpeech, for ſpeech is an effect and not a cauſe, but knowledg is a cauſe and not an effect; and nature hath infinite more ways to expreſs knowledg then man can imagine, *Wherefore*, he concludes, *that they ſhould mutually ſerve one another in ſuch a deſign, is more impoſſible, then that ſo many men, blind and dumb from their nativity, ſhould joyn their forces and wits together to build a Caſtle, or carve a ſtatue of ſuch a Creature, as none of them knew any more in ſeveral, then ſome one of the ſmalleſt parts thereof, but not the relation it bore to the whole.* I anſwer, Nature is neither blind nor dumb, nor any ways defective, but infinitely wiſe and knowing; for

blindneſs

blindneſs and dumbneſs are but effects of ſome of her particular actions, but there is no defect in ſelf-moving matter, nor in her actions in general; and it is abſurd to conceive the Generality of wiſdom according to an Irregular effect or defect of a particular Creature; for the General actions of Nature are both *life* and *knowledg*, which are the architects of all Creatures, and *know* better how to frame all kinds and ſorts of Creatures then man can conceive; and the ſeveral parts of Matter have a more eaſie way of communication, then Mans head hath with his hand, or his hand with pen, ink, and paper, when he *is* going to write; which later example will make you underſtand my opinion the better, if you do but compare the rational part of Matter to the head, the ſenſitive to the hand, the inanimate to *pen, ink* and paper, their action to writing, and their framed figures to thoſe figures or letters which are written; in all which is a mutual agreement without noiſe or trouble. But give me leave, *Madam*, to tell you, That ſelf-moving Matter may ſometimes erre and move irregularly, and in ſome parts not move ſo ſtrong, curious, or ſubtil as ſometimes, as in other parts, for Nature delights in variety; Nevertheleſs ſhe is more wiſe then any Particular Creature or part can conceive, which *is the* cauſe that Man thinks Nature's wiſe, ſubtil and lively actions, are as his own groſs actions, conceiving them to be conſtrained and turbulent, not free and eaſie, as well as wiſe and knowing; Whereas Nature's Creating, Generating and Producing actions are by an eaſie connexion of parts to parts, without Counterbuffs, Joggs and Jolts, producing a particular figure by degrees, and in order and method, as humane ſenſe and reaſon may well

well perceive: And why may not the ſenſitive and rational part of Matter know better how to make a Bee, then a Bee doth how to make Honey and Wax? or have a better communication betwixt them, then Bees that fly ſeveral ways, meeting and joyning to make their Combes in their Hives? But pardon, *Madam*, for I think it a Crime to compare the Creating, Generating and producing Coporeal Life and Wiſdom of Nature unto any particular Creature, although every particular Creature hath their ſhare, being a part of Nature. Wherefore thoſe, in my opinion, do groſly err, that bind up the ſenſitive matter onely to taſte, touch, hearing, ſeeing, and ſmelling; as if the ſenſitive parts of Nature had not more variety of actions, then to make *five ſenſes*; for we may well obſerve, in every Creature there is difference of ſenſe and reaſon according to the ſeveral modes of ſelf-motion; For the Sun, Stars, Earth, Air, Fire, Water, Plants, Animals, Minerals; although they have all ſenſe and knowledg, yet they have not all ſenſe and knowledg alike, becauſe ſenſe and knowledg moves not alike in every kind or ſort of Creatures, nay many times very different in one and the ſame Creature; but yet this doth not cauſe a general Ignorance, as to be altogether Inſenſible or Irrational, neither do the erroneous and irregular actions of ſenſe and reaſon prove an annihilation of ſenſe and reaſon; as for example, a man may become Mad or a Fool through the irregular motions of ſenſe and reaſon, and yet have ſtill the Perception of ſenſe and reaſon, onely the alteration is cauſed through the alteration of the ſenſitive and rational corporeal motions or actions, from regular to irregular; nevertheleſs he has Perceptions,

Thoughts, Ideas, Paſsions, and whatſoever is made by ſenſitive and rational Matter, neither can Perception be divided from Motion, nor Motion from Matter; for all ſenſation is Corporeal, and ſo is Perception I can add no more, but take my leave, and reſt,

MADAM,

Your faithful Friend

and Servant.

VIII.

MADAM,

Of the Immortality of the Soul, l. 2. c. 1. a. 3.

YOur *Author* is pleaſed to ſay, that *Matter is a Principle purely paſsive, and no otherwiſe moved or modified, then as ſome other thing moves and modifies it, but cannot move it ſelf at all; which is moſt demonſtrable to them that contend for ſenſe and perception in it: For if it had any ſuch perception, it would, by vertue of its ſelf-motion withdraw its ſelf from under the knocks of hammers, or fury of the fire; or of its own accord approach to ſuch things as are moſt agreeable to it, and pleaſing, and that without the help of muſcles, it being thus immediately endowed with a ſelf-moving power.* By his leave, *Madam*, I muſt tell you, that I ſee no conſequence in this argument; Becauſe ſome parts of matter cannot withdraw themſelves from the force and power of other parts, therefore they have neither ſenſe, reaſon, nor perception: For put the caſe, a man ſhould be over-

powr'd

powr'd by ſome other men, truely he would be forced to ſuffer, and no Immaterial Spirits, I think, would aſsiſt him. The very ſame may be ſaid of other Creatures or parts of Nature; for ſome may over-power others, as the fire, hammer and hand doth over-power a Horſe-ſhooe, which cannot prevail over ſo much odds of power and ſtrength; And ſo likewiſe it is with ſickneſs and health, life and death; for example, ſome corporeal motions in the body turning Rebels, by moving contrary to the health of an animal Creature, it muſt become ſick; for not every particular creature hath an abſolute power, the power being in the Infinite whole, and not in ſingle divided parts: Indeed, to ſpeak properly, there is no ſuch thing as an abſolute power in Nature; for though Nature hath power to move it ſelf, yet not beyond it ſelf. But miſtake me not, for I mean by an abſolute Power; not a circumſcribed and limited, but an unlimited power, no ways bound or confined, but abſolutely or every way Infinite, and there is not any thing that has ſuch an abſolute power but God alone: neither can Nature be undividable, being Corporeal or Material; nor reſt from motion being naturally ſelf-moving, and in a perpetual motion. Wherefore though Matter is ſelf-moving, and very wiſe, (although your *Author* denies it, calling thoſe Fools that maintain this [a] opinion) yet it cannot go beyond the rules of its Nature, no more then any Art can go beyond its Rules and Principles: And as for what your *Author* ſays, That every thing would approach to that, which is agreeable and pleaſant; I think I need no demonſtration to prove it; for we may plainly ſee it in all effects of Nature, that there is Sympathy

[a] *In the Append. to the Antid. c. 3. a.* 10.

pathy and Antipathy, and what is this elſe, but approaching to things agreeable and pleaſant, and withdrawing it ſelf from things diſagreeable, and hurtful or offenſive? But of this ſubject I ſhall diſcourſe more hereafter, wherefore I finiſh here, and reſt,

MADAM,

Your Faithful Friend

and Servant.

IX.

MADAM,

In the Preface before the Imm. of the Soul.

YOur *Authors* opinion is, That *Matter being once actually divided as far as poſsibly it can, it is a perfect contradiction it ſhould be divided any further.* I anſwer, Though Nature is Infinite, yet her actions are not all dilative nor ſeparative, but ſome divide and ſome compoſe, ſome dilate and ſome contract, which cauſes a mean betwixt Natures actions or motions. Next your *Author* ſays, That *as Infinite Greatneſs has no Figure, ſo Infinite Littleneſs hath none alſo.* I anſwer, Whatſoever hath a body, has a figure; for it is impoſsible that *ſubſtance*, or *body*, and *figure*, ſhould be ſeparated from each other, but whereſoever is body or ſubſtance, there is alſo figure, and if there be an infinite ſubſtance, there muſt alſo be an infinite figure; although not a certain determined or circumſcribed figure, for ſuch a figure belongs onely to finite particulars; and

and therefore I am of your *Authors* mind, That it is a contradiction to ſay an Infinite Cube or Triangle, for a Cube and a Triangle is a perfect circumſcribed figure, having its certain compaſs and circumference, be it never ſo great or little; wherefore to ſay an Infinite Cube, would be as much as to ſay a Finite Infinite. But as for your *Authors* example of *Infinite matter, ſpace or duration, divided into three equal parts, all which he ſays muſt needs be Infinite, or elſe the whole wil not be ſo, and then the middle part of them will ſeem both Finite and Infinite.* I anſwer, That Matter is not dividable into three equal parts, for three is a finite number and ſo are three equal parts; but I ſay that Matter being an Infinite body, is dividable into Infinite parts, and it doth not follow, as your *Author* ſays, That one of thoſe infinite parts muſt be infinite alſo, for elſe there would be no difference betwixt the whole and its parts; I ſay whole for diſtinctions and better expreſsions ſake, and do not mean ſuch a whole which hath a certain number of parts, and is of a certain and limited figure, although never ſo great; but an Infinite whole, which expreſsion I muſt needs uſe, by reaſon I ſpeak of Infinite parts; and that each one of theſe Infinite parts in number may be finite in ſubſtance or figure, is no contradiction, but very probable and rational; nay, I think it rather abſurd to ſay that each part is infinite; for then there would be no difference betwixt parts and whole, as I ſaid before. Onely this is to be obſerved, that the Infinite whole is Infinite in ſubſtance or bulk, but the parts are infinite in number, and not in bulk, for each part is circumſcribed, and finite in its exterior figure and ſubſtance. But miſtake me not, when I ſpeak of circum-

ſcribed and finite ſingle parts; for I do not mean, that each part doth ſubſiſt ſingle and by it ſelf, there being no ſuch thing as an abſolute ſingle part in Nature, but Infinite Matter being by ſelf-motion divided into an infinite number of parts, all theſe parts have ſo near a relation to each other, and to the infinite whole, that one cannot ſubſiſt without the other; for the Infinite parts in number do make the Infinite whole, and the Infinite whole conſiſts in the Infinite number of parts; wherefore it is onely their figures which make a difference betwixt them; for each part having its proper figure different from the other, which is circumſcribed and limited, it is called a finite ſingle part; and ſuch a part cannot be ſaid Infinitely dividable, for infinite compoſition and diviſion belong onely to the Infinite body of Nature, which being infinite in ſubſtance may alſo be infinitely divided, but not a finite and ſingle part: Beſides, Infinite compoſition doth hinder the Infinite diviſion, and Infinite diviſion hinders the Infinite compoſition; ſo that one part cannot be either infinitely compoſed, or infinitely divided; and it is one thing to be dividable, and another to be divided. And thus, when your *Author* mentions in another place, That *if a body be diviſible into Infinite Parts, it hath an Infinite number of extended parts*: If by extenſion he mean corporeal dimenſion, I am of his opinion; for there is no part, be it never ſo little in Nature, but is material; and if material it has a body; and if a body, it muſt needs have a bodily dimenſion; and ſo every part will be an extended part: but ſince there is no part but is finite in its ſelf, it cannot be diviſible into infinite parts; neither can any part be infinitely dilated or contracted; for as compoſition

Antid. Book. 2. c. 4.

ſition and diviſion do hinder and obſtruct each other from running into Infinite, ſo doth dilation hinder the Infinite contraction, and contraction the Infinite dilation, which, as I ſaid before, cauſes a mean betwixt Nature's actions; nevertheleſs, there are Infinite dilations and contractions in Nature, becauſe there are Infinite contracted and dilated parts, and ſo are infinite diviſions becauſe there are infinite divided parts; but contraction, dilation, extenſion, compoſition, diviſion, and the like, are onely Nature's ſeveral actions; and as there can be no ſingle part in Nature that is Infinite, ſo there can neither be any ſingle Infinite action. But as for Matter, Motion and Figure, thoſe are Indivisable and Inſeparable, and make but one body or ſubſtance; *for it is as impoſsible to divide them, as impoſ*ſible it is to your *Author* to ſeparate the eſſential proprieties, which he gives, from an Immortal Spirit; And as Matter, Motion and Figure are inſeparable; ſo is likewiſe Matter, Space, Place and Duration; For Parts, Motion, Figure, Place and Duration, are but one Infinite body; onely the Infinite parts are the Infinite diviſions of the Infinite body, and the Infinite body is a compoſition of the Infinite parts; but figure, place and body are all one, and ſo is time, and duration, except you will call time the diviſion of duration, and duration the compoſition of time; but infinite time, and infinite duration is all one in Nature: and thus Nature's Principal motions and actions are dividing, compoſing, and diſpoſing or ordering, according to her Natural wiſdom, by the Omnipotent God's leave and permiſsion. Concerning the *Sun*, which your *Author* ſpeaks of in the ſame place, and denies him to be a *Spectator of our Particular*

Particular affairs upon Earth; ſaying, there is no ſuch divine Principle in him, whereby he can do it. I will ſpeak nothing againſt, nor for it; but I may ſay; that the Sun hath ſuch a Principle as other Creatures have, which is, that he has ſenſitive and rational corporeal motions, as well as animals or other Creatures, although not in the ſame manner, nor the ſame organs; and if he have ſenſitive and rational motions, he may alſo have ſenſitive and rational knowledg or perception, as well as man, or other animals and parts of Nature have, for ought any body knows; for it is plain to humane ſenſe and reaſon, that all Creatures muſt needs have rational and ſenſitive knowledg; becauſe they have all ſenſitive and rational matter and motions. But leaving the Sun for Aſtronomers to contemplate upon, I take my leave, and reſt,

MADAM,

Your faithful Friend,

and Servant.

X.

MADAM,

Append. to the Antid. c. 11.

YOur *Author* in his arguments againſt *Motion*, being a *Principle of Nature*, endeavours to prove, that Beauty, Colour, Symmetry, and the like, in Plants, as well as in other Creatures, are no reſult from the meer motion of the matter; and forming this objection,

objection, *It may be ſaid*, ſays he, *That the regular motion of the matter made the firſt plant of every kind; but we demand, What regulated the motion of it, ſo as to guide it, to form it ſelf into ſuch a ſtate?* I anſwer, The Wiſdom of Nature or infinite Matter did order its own actions ſo, as to form thoſe her Parts into ſuch an exact and beautiful figure, as ſuch a Tree, or ſuch a Flower, or ſuch a Fruit, and the like; and ſome of her Parts are pleaſed and delighted with other parts, but ſome of her parts are afraid or have an averſion to other parts; and hence is like and diſlike, or ſympathy and antipathy, hate and love, according as nature, which is infinite ſelf-moving matter, pleaſes to move; for though Natural Wiſdom is dividable into parts, yet theſe parts are *united in* one infinite Body, and make but one Being in it ſelf, like as the ſeveral parts of a man make up but one perfect man; for though a man may be wiſe in ſeveral cauſes or actions, yet it is but one wiſdom; and though a Judg may ſhew Juſtice in ſeveral cauſes, yet it *is but one Juſtice; for Wiſdom and Juſtice, though* they be practiſed in ſeveral cauſes, yet it is but one Wiſdom, and one Juſtice; and ſo, all the parts of a mans body, although they move differently, yet are they but one man's bodily actions; Juſt as a man, if he carve or cut out by art ſeveral ſtatues, or draw ſeveral Pictures, thoſe ſtatues or pictures are but that one man's work. The like may be ſaid of Natures Motions and Figures; all which are but one ſelf-active or ſelf-moving Material Nature. But Wiſe Nature's Ground or Fundamental actions are very Regular, as you may obſerve in the ſeveral and diſtinct kinds, ſorts and particulars of her Creatures, and in their diſtinct Pro-

prieties, Qualities, and Faculties, belonging not onely to each kind and ſort, but to each particular Creature; and ſince man is not able to know perfectly all thoſe proprieties which belong to animals, much leſs will he be able to know and judg of thoſe that are in Vegetables, Minerals and Elements; and yet theſe Creatures, for any thing Man knows, may be as knowing, underſtanding, and wiſe as he; and each as knowing of its kind or ſort, as man is of his; But the mixture of ignorance and knowledg in all Creatures proceeds from thence, that they are but Parts; and there is no better proof, that the mind of man *is* dividable, then that it *is not* perfectly knowing; nor no better proof that it is compoſeable then that it knows ſo much: but all minds are not alike but ſome are more compoſed then others, *which is* the cauſe, ſome *know* more then others; for if the mind in all men were alike, all men would have the ſame Imaginations, Fancies, Conceptions, Memories, Remembrances, Paſsions, Affections, Underſtanding, and ſo forth: The ſame may be ſaid of their bodies; for if all mens ſenſitive parts were as one, and not dividable and compoſeable, all their Faculties, Proprieties, Conſtitutions, Complexions, Appetites, would be the ſame in every man without any difference; but humane ſenſe and reaſon doth well perceive, that neither the mind, life nor body are as one piece, without diviſion and compoſition. Concerning the divine Soul, I do not treat of it; onely this I may ſay, That all are not devout alike, nor thoſe which are, are not at all times alike devout. But to conclude: ſome of our modern Philoſophers think they do God good ſervice, when they endeavour to prove Nature, as Gods good Servant, to

be

be ſtupid, ignorant, fooliſh and mad, or any thing rather then wiſe, and yet they believe themſelves wiſe, as if they were no part of Nature; but I cannot imagine any reaſon why they ſhould rail on her, except Nature had not given them as great a ſhare or portion, as ſhe hath given to others; for children in this caſe do often rail at their Parents, for leaving their Brothers and Siſters more then themſelves. However, Nature can do more then any of her Creatures: and if Man can Paint, Imbroider, Carve, Ingrave curiouſly; why may not Nature have more Ingenuity, Wit and Wiſdom then any of her particular Creatures? The ſame may be ſaid of her Government. And ſo leaving Wiſe Nature, I reſt,

MADAM,

Your faithful Friend

and Servant.

XI.

MADAM,

TO your *Authors* argument, That *if Motion belong naturally to Matter, Matter being Uniform, it muſt be alike moved in every part or particle imaginable of it, by reaſon this Motion being natural and eſſential to Matter, is alike every way.* I anſwer, That this is no more neceſſary, then that the ſeveral actions of one body, or of one part of a body ſhould be alike; for though Matter is one and the ſame in its Nature, *Antid. l. c. 1.*

and

and never changes, yet the motions are various, which motions are the ſeveral actions of one and the ſame Natural Matter; and this is the cauſe of ſo many ſeveral Creatures; for ſelf-moving matter by its ſelf-moving power can act ſeveral ways, modes or manners; and had not natural matter a ſelf-acting power, there could not be any variety in Nature; for Nature knows of no reſt, there being no ſuch thing as reſt in Nature; but ſhe is in a perpetual motion, I mean ſelf-motion, given her from God: Neither do I think it Atheiſtical (as your *Author* deems) to maintain this opinion of ſelf-motion, as long as I do not deny the Omnipotency of God; but I ſhould rather think it Irreligious to make ſo many ſeveral Creatures as Immaterial Spirits, like ſo many ſeverall Deities, to rule and govern Nature and all material ſubſtances in Nature; for what Atheiſm doth there lie in ſaying, that natural matter is naturally moving, and wiſe in her ſelf? Doth this oppoſe the omnipotency and Infinite wiſdom of God? It rather proves and confirms it; for all Natures free power of moving and wiſdom is a gift of God, and proceeds from him; but I muſt confeſs, it deſtroys the power of Immaterial ſubſtances, for Nature will not be ruled nor governed by them, and to be againſt Natural Immaterial ſubſtances, I think, is no Atheiſme, except we make them Deities; neither is it Atheiſme to contradict the opinion of thoſe, that believe ſuch natural incorporeal Spirits, unleſs man make himſelfa God. But although Nature is wiſe, as I ſaid before, and acts methodically, yet the variety of motions is the cauſe of ſo many Irregularities in Nature, as alſo the cauſe of Irregular opinions; for all opinions are made by ſelf-moving matters motions,

motions, or (which is all one) by corporeal ſelf-motion, and ſome in their opinions do conceive Nature according to the meaſure of themſelves, as that Nature can, nor could not do more, then they think, nay, ſome believe they can do as much as Nature doth; which opinions, whether they be probable or regular, I'le let any man judg; adding onely this, that to humane ſenſe and reaſon it appears plainly, that as God has given Nature a power to act freely, ſo he doth approve of her actions, being wiſe and methodical in all her ſeveral Productions, Generations, Transformations and Deſigns: And ſo I conclude for the preſent, onely ſubſcribe my ſelf, as really I am,

MADAM

Your faithful Friend,

and Servant.

XII.

MADAM,

I Am of your *Authors* opinion, concerning ſelf-activity or ſelf-motion, That *what is Active of it ſelf, can no more ceaſe to be active then to be*: And I have been always of this opinion, even from the firſt begining of my conceptions in natural Philoſophy, as you may ſee in my firſt Treatiſe of Natural Philoſophy, which I put forth eleven years ſince; where I ſay, That ſelf-moving Matter is in a Perpetual motion; But your *Author* endeavors

Of the Immortality of the Soul, l. 1. c. 7.

deavors from thence to conclude, That *Matter is not ſelf-active, becauſe it is reducible to reſt.* To which I anſwer, That there is no ſuch thing as Reſt in Nature: Not do I ſay, that all ſorts of motions are ſubject to our ſenſes, for thoſe that are ſubject to our ſenſitive Perceptions, are but groſs Motions, in compariſon to thoſe that are not ſubject to our exterior ſenſes: as for example; We ſee ſome bodies dilate, others conſume, others corrupt; yet we do not ſee how they dilate, nor how they conſume, nor how they corrupt: Alſo we ſee ſome bodies contract, ſome attract, ſome condenſe, ſome conſiſt, *&c.* yet we do not ſee their contracting, attracting, condenſing, conſiſting or retenting motions; and yet we cannot ſay, they are not corporeal motions, becauſe not ſubject to our exterior ſenſes; for if there were not contracting, attracting, retenting or conſiſtent corporeal ſelf-motions, it had been impoſsible that any creature could have been compoſed into one united figure, much leſs ſtayed and continued in the ſame figure without a general alteration. But your *Author* ſays, *If Matter, as Matter, had Motion, nothing would hold together, but Flints, Adamants, Braſs, Iron, Sea, this whole Earth, would ſuddenly melt into a thinner ſubſtance then the ſubtil Air, or rather it never had been condenſated together to this conſiſtency we find it.* But I would ask him, what reaſon he can give, that corporeal ſelf-motion ſhould make all matter rare and fluid, unleſs he believe there is but one kind of motion in Nature, but this, human ſenſe and reaſon will contradict; for we may obſerve there are Infinite changes of Motion, and there is more variety and curioſity in corporeal motions, then any one ſingle Creature can imagine,

much

much leſs know; but I ſuppoſe he conceives all corporeal matter to be groſs, and that not any corporeal motion can be ſubtil, penetrating, contracting and dilating; and that whatſoever is penetrating, contracting and dilating, is Individable: But by his leave, *Madam*, this doth not follow; for though there be groſs degrees of Matter, and ſtrong degrees of Corporeal Motions, yet there are alſo pure and ſubtil degrees of Matter and Motions; to wit, that degree of Matter, which I name ſenſitive and rational Matter, which is natural Life and Knowledg, as ſenſitive Life and rational Knowledg. Again, your *Author* askes, *What glue or cement holds the parts of hard matter in Stones and Metals together?* I anſwer, Conſiſtent or retentive corporeal motions, by an agreeable union and conjunction in the ſeveral parts of Metal or Stone; and theſe retentive or conſiſtent motions, are as ſtrong and active, if not more, then ſome dilative or contractive motions; for I have mentioned heretofore, that, as ſenſitive and rational corporeal motions are in all Creatures, ſo alſo in Stone, Metal, and any other denſe body whatſoever; ſo that not any one Creature or part of Matter is without Motion, and therefore not any thing is at reſt. But, *Madam*, I dare ſay, I could bring more reaſon and ſenſe to prove, that ſenſitive and rational Matter is fuller of activity, and has more variety of motion, and can change its own parts of ſelf-moving Matter more ſuddenly, and into more exterior figures, then Immaterial Spirits can do upon natural Matter. But your *Author* ſays, That Immaterial Spirits are endued with Senſe and Reaſon; I ſay, My ſenſitive and rational corporeal Matter is Senſe and Reaſon it ſelf, and is the

Architect

Architect or Creator of all figures of Natural matter; for though all the parts of Matter are not ſelf-moving, yet there is not any part that is not moving or moved, by and with the mover, which is animate matter. And thus I conclude, and reſt conſtantly,

MADAM.

Your Faithful Friend

and Servant.

XIII.

MADAM,

THat Matter *is* uncapable of Senſe, your *Author* proves by the example of dead Carcaſſes; *For,* ſays he, *Motion and Senſe being really one and the ſame thing, it muſt needs follow, that where there is motion, there is alſo ſenſe and perception; but on the contrary, there is Reaction in dead Carkaſſes, and yet no Senſe.* I anſwer ſhortly, That it is no conſequence, becauſe there is no animal ſenſe nor exterior perceptible local motion in a dead Carcaſs, therefore there is no ſenſe at all in it; for though it has not animal ſenſe, yet it may nevertheleſs have ſenſe according to the nature of that figure, into which it did change from being an animal. Alſo he ſays, *If any Matter have ſenſe, it will follow, that upon reaction all ſhall have the like; and that a Bell while it is ringing, and a Bow while it is bent, and every Jack-in-a-box, that School-boys play with, ſhall be*

Of the Immortality of the Soul. l. 2. c. 2.

living

living animals. I anſwer, It is true, if reaction made ſenſe; but reaction doth not make ſenſe, but ſenſe makes reaction; and though the Bell hath not an animal knowledg, yet it may have a mineral life and knowledg, and the Bow, and the Jack-in-a-box a vegetable knowledg; for the ſhape and form of the Bell, Bow, and Jack-in-a-box, is artificial; nevertheleſs each in its own kind may have as much knowledg as an animal in his kind; onely they are different according to the different proprieties of their Figures: And who can prove the contrary that they have not? For certainly Man cannot prove what he cannot know; but Mans nature is ſo, that knowing but little of other Creatures, he preſently judges there is no more knowledg in Nature, then what Man, at leaſt Animals, have; and confines all ſenſe onely to Animal ſenſe, and all knowledg to Animal knowledg. Again ſays your Author, *That Matter is utterly uncapable of ſuch operations as we find in our ſelves, and that therefore there is ſomething in us Immaterial or Incorporeal; for we find in our ſelves that one and the ſame thing, both hears, and ſees, and taſtes, and perceives all the variety of objects that Nature manifeſts unto us.* I anſwer, That is the reaſon there is but one matter, and that all natural perception is made by the animate part of matter; but although there is but one matter in Nature, yet there are ſeveral parts or degrees, and conſequently ſeveral actions of that onely matter, which cauſes ſuch a variety of perceptions, both ſenſitive and rational: the ſenſitive perception is made by the ſenſitive corporeal motions, copying out the figures of forreign objects in the ſenſitive organs of the ſentient; and if thoſe ſenſitive motions do pat-

tern out forreign objects in each ſenſitive organ alike at one and the ſame time, then we hear, ſee, taſte, touch and ſmell, at one and the ſame time: But Thoughts and Paſsions, as Imagination, Conception, Fancy, Memory, Love, Hate, Fear, Joy, and the like, are made by the rational corporeal motions in their own degree of matter, to wit, the rational. And thus all perception is made by one and the ſame matter, through the variety of its actions or motions, making various and ſeveral figures, both ſenſitive and rational. But all this variety in ſenſe and reaſon, or of ſenſitive and rational perceptions, is not made by parts preſsing upon parts, but by changing their own parts of matter into ſeveral figures by the power of ſelf-motion: For example, I ſee a Man or Beaſt; that Man or Beaſt doth not touch my eye in the leaſt, neither in it ſelf, nor by preſsing the adjoyning parts: but the ſenſitive corporeal motions ſtreight upon the ſight of the Man or Beaſt make the like figure in the ſenſitive organ, the Eye, and in the eyes own ſubſtance or matter, as being in the eye as well as the other degrees of matter, to wit, the rational and inanimate, for they are all mixt together. But this is to be obſerved, That the rational matter can and doth move in its own ſubſtance, as being the pureſt and ſubtilleſt degree of matter; but the ſenſitive being not ſo pure and ſubtil, moves always with the inanimate Matter, and ſo the perceptive figures which the rational Matter, or rational corporeal Motions make, are made in their own degree of Matter; but thoſe figures which the ſenſitive patterns out, are made in the organs or parts of the ſentient body proper to ſuch or ſuch a ſenſe or perception; as in an animal Creature, the perception of ſight

is

is made by the ſenſitive corporeal motions in the Eye; the perception of hearing, in the Ear, and ſo forth. As for what your *Author* ſays, *That we cannot conceive any portion of Matter, but is either hard or ſoft*; I anſwer, That theſe are but effects of Matters actions, and ſo is rare, and denſe, and the like; but there are ſome Creatures which ſeem neither perfectly rare, nor denſe, nor hard, nor ſoft, but of mixt qualities; as for example, Quickſilver ſeems rare, and yet is denſe; ſoft, and yet is hard; for though liquid Quickſilver is ſoft to our touch, and rare to our ſight, yet it is ſo denſe and hard, as not to be readily diſſolved from its nature; and if there be ſuch contraries and mixtures in one particular creature made of ſelf-moving Matter, what will there not be in Matter *it ſelf*, according to the old ſaying: *If the Man ſuch praiſe ſhall have; What the Maſter that keeps the knave?* So if a particular Creature hath ſuch oppoſite qualities and mixtures of corporeal motions, what will the Creator have which is ſelf-moving Matter? Wherefore it is impoſsible to affirm, that ſelf-moving Matter is either all rare, or all denſe, or all hard, or all ſoft; becauſe by its ſelf-moving power it can be either, or both, and ſo by the change and variety of motion, there may be ſoft and rare Points, and hard and ſharp Points, hard and contracted Globes, and ſoft and rare Globes; alſo there may be preſſures of Parts without printing, and printing without preſſures. Concerning that part of Matter which is the *Common Senſorium*, your *Author* demands, *Whether ſome point of it receive the whole Image of the object, or whether it be wholly received into every point of it?* I anſwer, firſt, That all ſenſitive Matter is not in Points: Next, That not any ſingle part can

ſubſiſt of it ſelf; and then that one Part doth not receive all parts or any part into it ſelf; but that Parts by the power of ſelf-motion can and do make ſeveral figures of all ſizes and ſorts, and can Epitomize a great object into a very little figure; for outward objects do not move the body, but the ſenſitive and rational matter moves according to the figures of outward objects: I do not ſay always, but moſt commonly; *But*, ſays your Author, *How can ſo ſmal a Point receive the Images of ſo vaſt or ſo various objects at once, without obliteration or confuſion.* Firſt, I anſwer, That, as I ſaid before, ſenſitive Matter is not bound up to a Point, nor to be a ſingle ſelf-ſubſiſting Part. Next, as for confuſion, I ſay, that the ſenſitive matter makes no more confuſion, then an Engraver, when he engraves ſeveral figures in a ſmall ſtone, and a Painter draws ſeveral figures in a ſmall compaſs; for a Carver will cut out ſeveral figures in a Cherry-ſtone, and a Lady in a little black Patch; and if groſs and rude Art is able to do this, what may not Ingenious and Wiſe Nature do? And as Nature is ingenious and knowing in her ſelf, ſo in her Parts, and her Parts in her; for neither whole nor Parts are ignorant, but have a knowledg, each according to the motion of its own Parts; for knowledg is in Motion, and Motion in Matter; and the diverſity and variety of motion is the diverſity and variety of knowledg, ſo that every particular figure and motion hath its particular knowledg, as well as its proper and peculiar parts; and as the parts join or divide, ſo doth knowledg, which many times cauſes Arts to be loſt and found, and memory and remembrance in Particular Creatures: I do not ſay, they are utterly loſt in nature, but onely in reſpect to particular

cular Creatures, by the diſſolving and dividing of their particular figures. For the rational matter, by reaſon it moves onely in its own parts, it can change and re-change into ſeveral figures without diviſion of parts, which makes memory and remembrance: But men not conſidering or believing there might be ſuch a degree of onely matter, namely rational, it has made them erre in their judgments. Nevertheleſs there is a difference between ſenſitive and rational parts and motions, and yet they are agreeable moſt commonly in their actions, though not always. Alſo the rational can make ſuch figures as the ſenſitive cannot, by reaſon the rational has a greater power and ſubtiler faculty in making variety, then the ſenſitive; for the ſenſitive is bound to move with the inanimate, but the rational moves onely in its own parts; for though the ſenſitive and rational oftentimes cauſe each other to move, yet they are not of one and the ſame degree of matter, nor have they the ſame motions. And this rational Matter is the cauſe of all Notions, Conceptions, Imaginations, Deliberation, Determination, Memory, and any thing elſe that belongs to the Mind; for this matter is the mind of Nature, and ſo being dividable, the mind of all Creatures, as the ſenſitive is the life; and it can move, as I ſaid, more ſubtilly, and more variouſly then the ſenſitive, and make ſuch figures as the ſenſitive cannot, without outward examples and objects. But all diverſity comes by change of motion, and motions are as ſympathetical and agreeing, as antipathetical and diſagreeing. And though Nature's artificial motions, which are her Playing motions, are ſometimes extravagant, yet in her fundamental actions there is no extravagancy, as we may obſerve

by her exact rules in the various generations, the diſtinct kinds and ſorts, the ſeveral exact meaſures, times, proportions and motions of all her Creatures, in all which her wiſdom is well expreſt, and in the variety her wiſe pleaſure: To which I leave her, and reſt,

MADAM,

Your faithful Friend,

and Servant.

XIV.

MADAM,

Of the Immortality of the Soul. l. 2. c. 1. a. 1, 6, 7.

IF there be any ſenſe and perception in Matter, ſays your Author, *it muſt needs be Motion or Reaction of one part of matter againſt another; and that all diverſity of ſenſe and perception doth neceſſarily ariſe from the diverſity of the Magnitude, Figure, Poſture, Vigour and Direction of Motion in Parts of the Matter; In which variety of perceptions, Matter hath none, but ſuch, as are impreſſed by corporeal motions, that is to ſay, that are perceptions of ſome actions, or modificated Impreſſions of parts of matter bearing one againſt another.* I have declared, *Madam,* my opinion concerning Perception in my former Letters, that all Perception is not Impreſſion and Reaction, like as a Seal is printed on Wax: For example, the corporeal rational motions in the mind do not print, but move figuratively; but the ſenſitive motions do carve, print, engrave, and, as it were, pencil

pencil out, as alſo move figuratively in productions, and do often take patterns from the rational figures, as the rational motions make figures according to the ſenſitive patterns; But the rational can move without patterns, and ſo the ſenſitive: For ſurely, were a man born blind, deaf, dumb, and had a numb palſie in his exterior parts, the ſenſitive and rational motions would nevertheleſs move both in body and mind according to the nature of his figure; for though no copies were taken from outward objects, yet he would have thoughts, paſsions, appetites, and the like; and though he could not ſee exterior objects, nor hear exterior ſounds, yet no queſtion but he would ſee and hear interiouſly after the manner of dreams, onely they might not be any thing like to what is perceiveable by man in the World; but if he ſees not the Sun-light, yet he would ſee ſomething equivalent to it; and if he hears not ſuch a thing as Words, yet he would hear ſomething equivalent to words; for it is impoſsible, that his ſenſitive and rational faculties ſhould be loſt for want of an Ear, or an Eye; ſo that Perception may be without exterior object, or marks, or patterns: for although the ſenſitive Motions do uſually pattern out the figures of exterior objects, yet that doth not prove, but they can make interior figures without ſuch objects. Wherefore Perception is not always Reaction, neither is Perception and Reaction really one thing; for though Perception and Action is one and the ſame, yet not always Reaction; but did Perception proceed from the reaction of outward objects, a blind and deaf man would not ſo much as dream; for he would have no interior motion in the head, having no other exterior ſenſe but touch,

which,

which, if the body was troubled with a painful diſeaſe, he would neither be ſenſible of, but to feel pain, and interiouſly feel nothing but hunger and fulneſs; and his Mind would be as Irrational as ſome imagine Vegetables and Minerals are. To which opinion I leave them, and reſt,

MADAM,

Your Faithful Friend

and Servant.

XV.

MADAM,

YOur *Author* is pleaſed, in Mirth, and to diſgrace the opinion of thoſe which hold, that Perception is made by figuring, to bring in this following example: *Suppoſe*, ſays he, *one Particle ſhould ſhape it ſelf into a* George on Horſe-back *with a Lance in his hand, and another into an Inchanted Caſtle; this* George on Horſe-back *muſt run againſt the Caſtle, to make the Caſtle receive his impreſs and ſimilitude: But what then? Truly the Encounter will be very Unfortunate, for S.* George *indeed may eaſily break his Lance, but it is impoſsible that he ſhould by juſtling againſt the Particle in the form of a Caſtle, conveigh the intire ſhape of himſelf and his Horſe thereby, ſuch as we find our ſelves able to imagine of a man on Horſe-back; which is a Truth as demonſtrable as any Theorem in Mathematicks.* I anſwer, firſt,

In the ſecond Book of the Immortality of the Soul, ch. 6.

firſt, That there is no Particle ſingle and alone by it ſelf; Next, I ſay, It is more eaſie for the rational matter to put it ſelf into ſuch figures, and to make ſuch encounters, then for an Immaterial mind or ſuſtance to imagine it; for no imagination can be without figure, and how ſhould an Immaterial created ſubſtance preſent ſuch Figures, but by making them either in it ſelf or upon matter? For S. *George* and the *Caſtle* are figures, and their encounters are real fighting actions, and how ſuch figures and actions can be in the mind or memory, and yet not be, is impoſsible to conceive; for, as I ſaid, thoſe figures and actions muſt be either in the incorporeal mind, or in the corporeal parts of matter; and if the figures and motions may be in an incorporeal ſubſtance, much more is it probable for them to be in a corporeal; nay if the figures and their actions can be in groſs corporeal matter, why ſhould they not be in the pureſt part of matter, which is the rational matter? And as for being made known to the whole body, and every part thereof, it is not neceſſary, no more then it is neceſſary, that the private actions of every Man or Family ſhould be made known to the whole Kingdom, or Town, or Pariſh: But my opinion of ſelf-corporeal motion and perception, may be as demonſtrable as that of Immaterial Natural Spirits, which, in my mind, is not demonſtrable at all, by reaſon it is not corporeal or material; For how can that be naturally demonſtrable, which naturally is nothing? But your *Author* believes the Mind or rational Soul to be individable, and therefore concludes, that the Parts of the ſame Matter, although at great diſtance, muſt of neceſsity know each Particular act of each ſeveral Part; but that is not neceſ-

ſary; for if there were not ignorance through the diviſion of Parts, every man and other creatures would know alike; and there is no better proof, that matter, or any particular creature in nature is not governed by a created Immaterial Spirit, then that knowledg is in parts; for the hand doth not know what pain the head feels, which certainly it would do, if the mind were not dividable into parts; but an individable ſubſtance. But this is well to be obſerved, that ſome parts in ſome actions agree generally in one body, and ſome not; as for example, temperance and appetite do not agree; for the corporeal actions of appetite deſire to join with the corporeal actions of ſuch or ſuch other parts, but the corporeal actions of temperance do hinder and forbid it; whereupon there is a faction amongſt the ſeveral parts: for example, a Man deſires to be drunk with Wine; this deſire is made by ſuch corporeal actions as make appetite; the rational corporeal motions or actions which make temperance, oppoſe thoſe that make appetite, and that ſort of actions which hath the better, carryes it, the hand and other parts of the body obeying the ſtrongeſt ſide; and if there be no wine to ſatisfie the appetite, yet many times the appetite continues; that is, the parts continue in the ſame motions that make ſuch an appetite; but if the appetite doth not continue, then thoſe parts have changed their motions; or when by drinking, the appetite is ſatisfied, and ceaſes, then thoſe parts that made the appetite, have altered their former motions. But oftentimes the rational corporeal motions may ſo agree with the ſenſitive, as there may be no oppoſition or croſſing at all, but a ſympathetical mutual agreement betwixt

twixt them, at leaſt an approvement; ſo that the rational may approve what the ſenſitive covet or deſire: Alſo ſome motions of the rational, as alſo of the ſenſitive matter, may diſagree amongſt themſelves, as we ſee, that a man will often have a divided mind; for he will love and hate the ſame thing, deſire and not deſire one and the ſame thing, as to be in Heaven, and yet to be in the World: Moreover, this is to be obſerved, That all rational perceptions or cogitations, are not ſo perſpicuous and clear as if they were Mathematical Demonſtrations, but there is ſome obſcurity, more or leſs in them, at leaſt they are not ſo well perceivable without comparing ſeveral figures together, which proves, they are not made by an indivi*dable*, immaterial Spirit, but by dividable corporeal parts: *As for example*, Man writes oftentimes falſe, and ſeldom ſo exact, but he is forced to mend his hand, and correct his opinions, and ſometimes quite to alter them, according as the figures continue or are diſſolved and altered by change of motion, and according as the actions are quick or ſlow in theſe alterations, the humane mind is ſetled or wavering; and as figures are made, or diſſolved and transformed, Opinions, Conceptions, Imaginations; Underſtanding, and the like, are more or leſs; And according as theſe figures laſt, ſo is conſtancy or inconſtancy, memory or forgetfulneſs, and as thoſe figures are repeated, ſo is remembrance; but ſometimes they are ſo conſtant and permanent, as they laſt as long as the figure of the body, and ſometimes it happens not once in an age, that the like figures are repeated; and ſometimes they are repeated every moment: As for example; a man remembers or calls to mind the figure of another man, his friend, with all his qualities,

diſpoſitions,

diſpoſitions, actions, proprieties, and the like, ſeveral times in an hour, and ſometimes not once in a year, and ſo as often as he remembers him, as often is the figure of that man repeated; and as oft as he forgets him, ſo often is his figure diſſolved. But ſome imagine the rational motions to be ſo groſs as the Trotting of a Horſe, and that all the motions of Animate matter are as rude and courſe as renting or tearing aſunder, or that all impreſsions muſt needs make dents or creaſes. But as Nature hath degrees of corporeal matter, ſo ſhe hath alſo degrees of corporeal motions, Matter and Motion being but one ſubſtance; and it is abſurd to judg of the interior motions of ſelf-moving matter, by artificial or exterior groſs motions, as that all motions *muſt be like* the tearing of a ſheet of Paper, or *that the* printing and patterning of ſeveral figures of rational and ſenſitive matter muſt be like the printing of Books; nay, all artificial Printings are not ſo hard, as to make dents and impreſſes; *witneſs Writing, Painting, and the like*; for they do not diſturb the ground whereon the letters are written, or the picture drawn, and ſo the curious actions of the pureſt rational matter are neither rude nor rough; but although this matter *is* ſo ſubtil and pure, as not ſubject to exterior human ſenſes and organs, yet certainly it is dividable, not onely in ſeveral Creatures, but in the ſeveral parts of one and the ſame Creature, as well as the ſenſitive, which is the Life of Nature, as the other is the Soul; not the Divine, but natural Soul; neither is this Soul Immaterial, bnt Corporeal; not compoſed of raggs and ſhreds, but it is the pureſt, ſimpleſt and ſubtilleſt matter in Nature. But to conclude, I deſire you to remember, *Madam*, that this rational

rational and ſenſitive Matter in one united and finite Figure or particular Creature, has both common and particular actions; for as there are ſeveral kinds and ſorts of Creatures, and particulars in every kind and ſort: ſo the like for the actions of the rational and ſenſitive matter in one particular Creature. Alſo it is to be noted, That the Parts of rational matter, can more ſuddenly give and take Intelligence to and from each other, then the ſenſitive; nevertheleſs, all Parts in Nature, at leaſt adjoyning parts, have Intelligence between each other, more or leſs, becauſe all parts make but one body; for it is not with the parts of Matter, as with ſeveral Conſtables in ſeveral Hundreds, or ſeveral Pariſhes, which are a great way diſtant from each other, but they may be as cloſe as the combs of Bees, and yet as partable and as active as Bees. But concerning the Intelligence of Natures Parts, I have ſufficiently ſpoken in other places; and ſo I'le add no more, but that I unfeignedly remain,

MADAM,

Your faithful Friend

and Servant.

XVI.

MADAM,

In the Pref. of the Imm. of the Soul.

Senſation in corporeal motion is firſt, and Perception follows, ſayes your *Author*: to which opinion I give no aſſent, but do believe that Perception and Senſation are done both at one and the ſame time, as being one and the ſame thing without diviſion, either in reaſon or ſenſe, and are performed without any knocks, or jolts, or hitting againſt. But let me tell you, *Madam*, there ariſes a great miſtake by many, from not diſtinguiſhing well, ſenſitive Motion, and rational Motion; for though all motions are in one onely matter, yet that matter doth not move alwayes in the ſame manner, for then there could be no variety in Nature; and truly, if man, who is but a part of Nature, may move diverſly, and put himſelf into numerous poſtures; Why may not Nature? But concerning Motions, and their variety, to avoid tedious repetitions, I muſt ſtill refer you to my Book of *Philoſophical Opinions*; I'le add onely this, that it is well to be obſerved, That all Motions are not Impreſsions, neither do all Impreſſions make ſuch dents, as to diſturb the adjoyning Parts: Wherefore thoſe, in my opinion, underſtand *Nature* beſt, which ſay, that Senſation and Perception are really one and the ſame; but they are out, that ſay, there can be no communication at a diſtance, unleſs by preſſing and crowding; for the patterning of an outward object, may be done without any inforcement or diſturbance,

diſturbance, jogging or crowding, as I have declared heretofore; for the ſenſitive and rational motions in the ſenſitive and rational parts of matter in one creature, obſerving the exterior motions in outward objects, move accordingly, either regularly or irregularly in patterns; and if they have no exterior objects, as in dreams, they work by rote. And ſo to conclude, I am abſolutely of their opinion, who believe, that there is nothing exiſtent in Nature, but what is purely Corporeal, for this ſeems moſt probable in ſenſe and reaſon to me,

MADAM,

Your Faithful Friend

and Servant.

XVII.

MADAM,

OUtward Objects, as I have told you before, do not make Senſe and Reaſon, but Senſe and Reaſon do perceive and judg of outward objects; For the Sun doth not make ſight, nor doth ſight make light; but ſenſe and reaſon in a Man, or any other creature, do perceive and know there are ſuch objects as Sun, and Light, or whatſoever objects are preſented to them. Neither doth Dumbneſs, Deafneſs, Blindneſs, &c. cauſe an Inſenſibility, but Senſe through irregular actions cauſes them; I ſay, through Irregular actions, becauſe thoſe effects do not properly belong to the

the nature of that kind of Creatures; for every Creature, if regularly made, hath particular motions proper to its figure; for natural Matters wiſdom makes diſtinctions by her diſtinct corporeal motions, giving every particular Creature their due Portion and Proportion according to the nature of their figures, and to the rules of her actions, but not to the rules of Arts, Mathematical Compaſſes, Lines, Figures, and the like. And thus the Sun, Stars, Meteors, Air, Fire, Water, Earth, Minerals, Vegetables and Animals, may all have Senſe and Reaſon, although it doth not move in one kind or ſort of Creatures, or in one particular, as in another: For the corporeal motions differ not onely in kinds and ſorts, but alſo in Particulars, as is perceivable by human ſenſe and reaſon; Which is the cauſe, that Elements have elemental ſenſe and knowledg, and Animals animal ſenſe and knowledg, and ſo of Vegetables, Minerals, and the like. Wherefore the Sun and Stars may have as much ſenſitive and rational life and knowledg as other Creatures, but ſuch as is according to the nature of their figures, and not animal, or vegetable, or mineral ſenſe and knowledg. And ſo leaving them, I reſt,

MADAM,

Your faithful Friend

and Servant.

MA-

XVIII.

MADAM,

YOur *Author* denying that Fancy, Reaſon and Animadverſion are ſeated in the Brain, and that the Brain is figured into this or that Conception: *Amid. lib. 1. c. 11.* *I demand*, ſays he, *in what knot, loop or interval thereof doth this faculty of free Fancy and active Reaſon reſide?* My anſwer is, that in my opinion, Fancy and Reaſon are not made in the Brain, as there is a Brain, but as there is ſenſitive and rational matter, which makes not *onely the Brain*, but *all Thoughts*, Conceptions, Imaginations, Fancy, Underſtanding, Memory, Remembrance, and whatſoever motions are in the Head, or Brain: neither doth this ſenſitive and rational matter remain or act in one place of the Brain, but in every part thereof; and not *onely in* every part of the Brain, but in every part of the Body; nay, not onely in every part of a Mans Body, but in every part of Nature. But, *Madam*, I would ask thoſe, that ſay the Brain has neither ſenſe, reaſon, nor ſelf-motion, and therefore no Perception; but that all proceeds from an Immaterial Principle, as an Incorporeal Spirit, diſtinct from the body, which moveth and actuates corporeal matter; I would fain ask them, I ſay, where their Immaterial Ideas reſide, in what part or place of the Body? and whether they be little or great? Alſo I would ask them, whether there can be many, or but one Idea of God? If they ſay many, then there muſt be ſeveral, diſtinct Dei-

tical Ideas; if but one, Where doth this Idea reſide? If they ſay in the head, then the heart is ignorant of God; if in the heart, then the head is ignorant thereof, and ſo for all parts of the body; but if they ſay, in every part, then that Idea may be disfigured by a loſt member; if they ſay, it may dilate and contract, then I ſay it is not the Idea of God, for God can neither contract nor extend; nor can the Idea it ſelf dilate and contract, being immaterial; for contraction and dilation belong onely to bodies, or material beings: Wherefore the compariſons betwixt Nature and a particular Creature, and between God and Nature, are improper; much more betwixt God and Natures particular motions and figures, which are various and changeable, although methodical. The ſame I may ask of the Mind of Man, as I do of the Idea in the Mind. Alſo I might ask them, what they conceive the natural mind of man to be, whether material or immaterial? If material, their opinion is rational, and ſo the mind is dividable and compoſable; if immaterial, then it is a Spirit; and if a Spirit, it cannot poſsibly dilate nor contract, having no dimenſion nor diviſibility of parts, (although your *Author* proves it by the example of Light; but I have expreſt my meaning heretofore, that light is diviſible) and if it have no dimenſion, how can it be confined in a material body? Wherefore when your *Author* ſays the mind is a ſubſtance, it is to my reaſon very probable but not when he ſays, it is an immaterial ſubſtance which will never agree with my ſenſe and reaſon; for it muſt be either ſomething, or nothing, there being no *medium* between, in Nature. But pray miſtake me not, *Madam*, when I ſay Immaterial is nothing; for

I mean nothing Natural, or ſo as to be a part of Nature; for God forbid, I ſhould deny, that God is a Spiritual Immaterial ſubſtance, or Being; neither do I deny that we can have an Idea, notion, conception, or thought of the Exiſtence of God; for I am of your *Authors* opinion, That there is no Man under the cope of Heaven, that doth not by the light of Nature, know, and believe there is a God; but that we ſhould have ſuch a perfect Idea of God, as of any thing elſe in the World, or as of our ſelves, as your *Author* ſays, I cannot in ſenſe and reaſon conceive to be true or poſsible. Neither am I againſt thoſe Spirits, which the holy Scripture mentions, as Angels and Devils, and the divine Soul of Man; but I ſay onely, that no Immaterial *Spirit belongs* to Nature, ſo as to be a part thereof; for Nature is Material, or Corporeal; and whatſoever is not compoſed of matter or body, belongs not to Nature; nevertheleſs, Immaterial Spirits may be in Nature, although not parts of Nature. But there can neither be an Immaterial Nature, nor a Natural Immaterial; Nay, our very thoughts and conceptions of Immaterial are Material, as made of ſelf-moving Matter. Wherefore to conclude, theſe opinions in Men proceed from a Vain-glory, as to have found out ſomething that is not in Nature; to which I leave them, and their natural Immaterial Subſtances, like ſo many Hobgoblins to fright Children withal, reſting in the mean time,

MADAM,

Your faithful Friend,
and Servant.

MA-

XIX.

MADAM,

THere are various opinions concerning the ſeat of Common Senſe, as your *Author* rehearſeth them in his Treatiſe of the Immortality of the Soul; *Lib. 2. c. 4.* But my opinion is, That common ſenſe hath alſo a common place; for as there is not any part of the body that hath not ſenſe and reaſon, ſo ſenſe and reaſon is in all parts of the body, as it is obſervable by this, that every part is ſubject to pain and pleaſure, and all parts are moveable, moving and moved; alſo appetites are in every part of the body: As for example, if any part itches, it hath an appetite to be ſcratched, and every part can pattern out ſeveral objects, and ſo ſeveral touches; and though the rational part of matter is mixt in all parts of the body, yet it hath more liberty to make variety of Motions in the head, heart, liver, ſpleen, ſtomack, bowels, and the like, then in the other parts of the body; nevertheleſs, it is in every part, together with the ſenſitive: but they do not move in every part alike, but differ in each part more or leſs, as it may be obſerved; and although every part hath ſome difference of knowledg, yet all have life and knowledg, ſenſe and reaſon, ſome more, ſome leſs, and the whole body moves according to each part, and ſo do all the bodily Faculties and Proprieties, and not according to one ſingle part; the rational Soul being in all parts of the body: for if one part of the body ſhould have a dead Palſie,

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it is not, that the Soul is gone from that part, but that the ſenſitive and rational matter has altered its motion and figure from animal to ſome other kind; for certainly, the rational Soul, and ſo life, is in every part, as well in the Pores of the skin, as in the ventricles of the brain, and as well in the heel as in the head; and every part of the body knows its own office, what it ought to do, from whence follows an agreement of all the parts: And ſince there is difference of knowledg in every part of one body, well may there be difference between ſeveral kinds and ſorts, and yet there is knowledg in all; for difference of knowledg is no argument to prove they have no knowledg at all. Wherefore I am not of the opinion, that that which moves the *whole body, is as a Point,* or ſome ſuch thing in a little kernel or *Glandula* of the Brain, as an Oſtrich-egge is hung up to the roof of a Chamber; or that it is in the ſtomack like a ſingle penny in a great Purſe; neither is it in the midſt of the heart, like a Lady in a Lobſter; nor in the bloud, like as a Menow, or Sprat in the Sea; nor in the fourth Ventricle of the Brain, as a louſie Souldier in a Watch-tower. But you may ſay, it is like a farthing Candle in a great Church: I anſwer, That Light will not enlighten the by Chappels of the Church, nor the Queſt-houſe, nor the Belfrey; neither doth the Light move the Church, though it enlightens it: Wherefore the Soul after this manner doth not move the corporeal body, no more then the Candle moves the Church, or the Lady moves the Lobſter, or the Sprat the Sea as to make it ebb and flow. But this I deſire you to obſerve, *Madam,* that though all the body of man

or any other Creature, hath ſenſe and reaſon, which is life and knowledg, in all parts, yet theſe parts being all corporeal, and having their certain proportions, can have no more then what is belonging or proportionable to each figure: As for example; if a Man ſhould feed, and not evacuate ſome ways or other, he could not live; and if he ſhould evacuate and not feed, he could not ſubſiſt: wherefore in all Natures parts there is ingreſs and egreſs, although not always perceived by one creature, as Man; but all exterior objects do not enter into Man, or any other Creature, but are figured by the rational, and ſome by the ſenſitive parts or motions in the body; wherefore it is not rational to believe, that exterior objects take up any more room, then if there were none preſented to the ſenſitive organs: Nor is there any thing which can better prove the mind to be corporeal, then that there may be ſeveral Figures in ſeveral parts of the body made at one time, as Sight, Hearing, Taſting, Smelling, and Touching, and all theſe in each ſeveral organ, as well at one, as at ſeveral times; either by patterns, or not; which figuring without Pattern, may be done as well by the ſenſitive motions in the organs, as by the rational in the mind, and is called remembrance. As for example: a Man may hear or ſee without an object; which is, that the ſenſitive and rational matter repeat ſuch figurative actions, or make others in the ſenſitive organs, or in the mind: and Thoughts, Memory, Imagination, as alſo Paſsion, are no leſs corporeal actions then the motion of the hand or knee; neither hath the rational matter, being naturally wiſe, occaſion to jumble and knock her parts together, by reaſon every part knows naturally their office what they

they ought to do, or what they may do. But I conclude, repeating onely what I have ſaid oft before, that all Perceptions, Thoughts, and the like, are the Effects, and Life and Knowledg, the Nature and Eſſence of ſelf-moving Matter. And ſo I reſt,

MADAM,

Your Faithful Friend

and Servant.

XX.

MADAM,

I Am not able to conceive how the Mind of Man can be compared to a Table-book, in which nothing is writ; nor how to a Muſician, who being aſleep, doth not ſo much as dream of any Muſick, but being jogg'd and awakend by another, who tells him two or three words of a Song, and deſires him to ſing it, preſently recovers himſelf, and ſings upon ſo ſlight an Intimation: For ſuch intimations are nothing elſe but outward objects, which the interior ſenſe conſents to, and obeys; for interior ſenſe and reaſon doth often obey outward objects: and in my opinion there is no reſt in Nature, and ſo neither in the Mind or natural Soul of Man, which is in a perpetual motion, and needs therefore no jogging to put it into any actual motion; for it hath actual motion and knowledg in it ſelf, becauſe it is a ſelf-moving ſubſtance, actually knowing, and Material or Corporeal *Antid. Book 1. c. 5.*

Corporeal, not Immaterial, as your *Author* thinks: and this material or corporeal Mind is nothing elſe but what I call the rational matter, and the corporeal life is the ſenſitive matter. But this is to be obſerved, that the motions of the corporeal Mind do often imitate the motions of the ſenſitive Life, and theſe again the motions of the mind: I ſay oftentimes; for they do it not always, but each one can move without taking any pattern from the other. And all this I underſtand of the Natural Soul of Man; not of the Divine Soul, and her powers and faculties, for I leave that to Divines to inform us of; onely this I ſay, that men not conceiving the diſtinction between this natural and divine Soul, make ſuch a confuſion betwixt thoſe two Souls and their actions, which cauſes ſo many diſputes and opinions. But if Nature hath power from God to produce all kinds of Vegetables, Minerals, Elements, Animals, and other ſorts of Creatures, Why not alſo Man? Truly if all Creatures are natural Creatures, Man muſt be ſo too; and if Man is a natural Creature, he muſt needs have natural ſenſe and reaſon, as well as other Creatures, being compoſed of the ſame matter they are of. Neither is it requiſite, that all Creatures, being of the ſame matter, muſt have the ſame manner of ſenſitive and rational knowledg; which if ſo, it is not neceſſary for Corn to have Ears to hear the whiſtling or chirping of Birds, nor for Stones to have ſuch a touch of feeling as animals have, and to ſuffer pain, as they do, when Carts go over them; as your *Author* is pleaſed to argue out of *Æſopes* Tales; or for the Heliotrope to have eyes to ſee the Sun: for what neceſsity

is there that they ſhould have humane ſenſe and reaſon? which is, that the rational and ſenſitive matter ſhould act and move in them as ſhe doth in man or animals: Certainly if there muſt be any variety in nature, it is requiſite ſhe ſhould not; wherefore all Vegetables, Minerals, Elements, and Animals, have their proper motions different from each others, not onely in their kinds and ſorts, but alſo in their particulars. And though Stones have no progreſsive motion to withdraw themſelves from the Carts going over them, which your *Author* thinks they would do, if they had ſenſe, to avoid pain: nevertheleſs they have motion, and conſequently ſenſe and reaſon, according to the nature and propriety of their figure, as well as man has according to his. But this is alſo to be obſerved, that not any humane Creature, which is accounted to have the perfecteſt ſenſe and reaſon, is able always to avoid what is hurtful or painful, for it is ſubject to it by Nature: Nay, the Immaterial Soul it ſelf, according to your *Author*, cannot by her ſelf-contracting faculty withdraw her ſelf from pain. Wherefore there is no manner of conſequence to conclude from the ſenſe of Animals to the ſenſe of Minerals, they being as much different as their Figures are; And ſaying this, I have ſaid enough to expreſs the opinion and mind of,

Append. to the Antid. ch. 3.

MADAM,

Your faithful Friend

and Servant.

XXI.

MADAM,

YOur *Author* endeavours very much to prove the Exiſtency of a *Natural Immaterial Spirit*, whom he defines to be an *Incorporeal ſubſtance., Indiviſible, that can move it ſelf, can penetrate, contract and dilate it ſelf, and can alſo move and alter the matter.* Whereof, if you will have my opinion, I confeſs freely to you, that in my ſenſe and reaſon I cannot conceive it to be poſsible, that there is any ſuch thing in Nature; for all that is a ſubſtance in Nature, is a body, and what has a body, is corporeal; for though there be ſeveral degrees of matter, as in purity, rarity, ſubtilty, activity; yet there is no degree ſo pure, rare and ſubtil, that can go beyond its nature, and change from corporeal to incorporeal, except it could change from being ſomething to nothing, which is impoſsible in Nature. Next, there is no ſubſtance in Nature that is not diviſible; for all that is a body, or a bodily ſubſtance, hath extenſion, and all extenſion hath parts, and what has parts, is diviſible. As for ſelf-motion, contraction and dilation, theſe are actions onely of Natural Matter; for Matter by the Power of God is ſelf-moving, and all ſorts of motions, as contraction, dilation, alteration, penetration, *&c.* do properly belong to Matter; ſo that natural Matter ſtands in no need to have ſome Immaterial or Incorporeal ſubſtance to move, rule, guide and govern her, but ſhe is able enough to do it all her ſelf by the free

free Gift of the Omnipotent God; for why ſhould we trouble our ſelves to invent or frame other unconceivable ſubſtances, when there is no need for it, but Matter can act, and move as well without them and of it ſelf? Is not God able to give ſuch power to Matter, as to an other Incorporeal ſubſtance? But I ſuppoſe this opinion of natural Immaterial Spirits doth proceed from Chymiſtry, where the extracts are vulgarly called Spirits; and from that degree of Matter, which by reaſon of its purity, ſubtilty and activity, is not ſubject to our groſſer ſenſes; However, theſe are not Incorporeal, be they never ſo pure and ſubtil. And I wonder much that men endeavour to prove Immaterial Spirits by corporeal Arts, when as Art is not able to demonſtrate Nature and her actions; for Art is but the effect of Nature, and expreſſes rather the variety, then the truth of natural motions; and if Art cannot do this, much leſs will it be able to expreſs what is not in Nature, or what is beyond Nature; as to *trace the Viſible* (or rather Invi- *Antid. lib. 2 ch. 2.*
ſible) *footſteps of the divine Councel and Providence*, or o demonſtrate things ſupernatural, and which go beyond mans reach and capacity. But to return to Immaterial Spirits, that they ſhould rule and govern infinite corporeal matter, like ſo many demy-Gods, by a dilating nod, and a contracting frown, and cauſe ſo many kinds and ſorts of Corporeal Figures to ariſe, being Incorporeal themſelves, is Impoſsible for me to conceive; for how can an Immaterial ſubſtance cauſe a Material corporeal ſubſtance, which has no motion in it ſelf, to form ſo many ſeveral and various figures and creatures, and make ſo many alterations, and continue their kinds and ſorts by perpetual ſucceſsions of Particulars? But perchance

perchance the Immaterial ſubſtance gives corporeal matter motion. I anſwer, My ſenſe and reaſon cannot underſtand, how it can give motion, unleſs motion be different, diſtinct and ſeparable from it; nay, if it were, yet being no ſubſtance or body it ſelf, according to your *Authors* and others opinion, the queſtion is, how it can be tranſmitted or given away to corporeal matter? Your *Author* may ſay, That his Immaterial and Incorporeal ſpirit of Nature, having ſelf-motion, doth form Matter into ſeveral Figures: I anſwer, Then that Immaterial ſubſtance muſt be transformed and metamorphoſed into as many ſeveral figures as there are figures in Matter; or there muſt be as many ſpirits, as there are figures; but when the figures change, what doth become of the ſpirits? Neither can I imagine, that an Immaterial ſubſtance, being without body, can have ſuch a great ſtrength, as to grapple with groſs, heavy, dull, and dead Matter; Certainly, in my opinion, no Angel, nor Devil, except God Impower him, would be able to move corporeal Matter, were it not ſelf-moving, much leſs any Natural Spirit. But God is a Spirit, and Immovable; and if created natural Immaterials participate of that Nature, as they do of the Name, then they muſt be Immovable alſo. Your *Author, Madam,* may make many ſeveral degrees of Spirits; but certainly not I, nor I think any natural Creature elſe, will be able naturally to conceive them. He may ſay, perchance, There is ſuch a cloſe conjunction betwixt Body and Spirit, as I make betwixt rational, ſenſitive, and inanimate Matter. I anſwer, That theſe degrees are all but one Matter, and of one and the ſame Nature as meer Matter, different onely in degrees of purity,

purity, ſubtilty, and activity, whereas Spirit and Body are things of contrary Natures. In fine, I cannot conceive, how a Spirit ſhould fill up a place or ſpace, having no body, nor how it can have the effects of a body, being none it ſelf; for the effects flow from the cauſe; and as the cauſe is, ſo are its effects: And ſo confeſsing my ignorance, I can ſay no more, but reſt,

MADAM,

Your Faithful Friend

and Servant.

XXII.

MADAM;

YOur *Author* having aſsigned Indiviſibility to the Soul or Spirit that moves and actuates matter, I deſire to know, how one Indiviſible Spirit can be in ſo many dividable parts? For there being Infinite parts in Nature, they muſt either have one Infinite Spirit to move them, which muſt be dilated infinitely, or this Spirit muſt move ſeverally in every part of Nature: If the firſt, then I cannot conceive, but all motion muſt be uniform, or after one and the ſame manner; nay, I cannot underſtand, how there can be any dilation and contraction, or rather any motion of the ſame ſpirit; by reaſon if it dilate, then, (being equally ſpread out in all the parts of Matter,) it muſt dilate beyond Matter; and if it contract, it muſt leave ſome parts of matter void, and without

motion. But if the Spirit moves every part ſeverally, then he is diviſible; neither can I think, that there are ſo many Spirits as there are Parts in Nature; for your *Author* ſays, there is but one Spirit of Nature; I will give an eaſie and plain example: When a Worm is cut into two or three parts, we ſee there is ſenſitive life and motion in every part, for every part will ſtrive and endeavour to meet and joyn again to make up the whole body; now if there were but one indiviſible Life, Spirit, and Motion, I would fain know, how theſe ſevered parts could move all by one Spirit. Wherefore, Matter, in my opinion, has ſelf-motion in it ſelf, which is the onely ſoul and life of Nature, and is dividable as well as compoſable, and full of variety of action; for it is as eaſie for ſeveral parts to act in ſeparation, as in compoſition, and as eaſie in compoſition as in ſeparation; Neither is every part bound to one kind or ſort of Motions; for we ſee in exterior local motions, that one man can put his body into ſeveral ſhapes and poſtures, much more can Nature. But is it not ſtrange, *Madam*, that a man accounts it abſurd, ridiculous, and a prejudice to Gods Omnipotency, to attribute ſelf-motion to Matter, or a material Creature, when it is not abſurd, ridiculous, or any prejudice to God, to attribute it to an Immaterial Creature? What reaſon of abſurdity lies herein? Surely I can conceive none, except it be abſurd and ridiculous to make that, which no man can know or conceive what it is, *viz.* an immaterial natural Spirit, (which is as much as to ſay, a natural No-thing) to have motion, and not onely motion, but ſelf-motion; nay, not onely ſelf-motion, but to move, actuate, rule, govern, and guide Matter;

or

or corporeal Nature, and to be the cauſe of all the moſt curious varieties and effects in nature: Was not God able to give ſelf-motion as well to a Material, as to an Immaterial Creature, and endow Matter with a ſelf-moving power? I do not ſay, *Madam*, that Matter hath motion of it ſelf, ſo, that it is the prime cauſe and principle of its own ſelf-motion; for that were to make Matter a God, which I am far from believing; but my opinion is, That the ſelf-motion of Matter proceeds from God, as well as the ſelf-motion of an Immaterial Spirit; and that I am of this opinion, the laſt Chapter of my Book of Philoſophy will enform you, where I treat of the Deitical Centre, as the Fountain from whence all things do flow, and which is the ſupream Cauſe, Author, Ruler and Governor of all. Perhaps you will ſay, it is, becauſe I make Matter Eternal. 'Tis true, *Madam*, I do ſo: but I think Eternity doth not take off the dependance upon God, for God may nevertheleſs be above Matter, as I have told you before. You may ask me how that can be? I ſay, As well as any thing elſe that God can do beyond our underſtanding: For I do but tell you my opinion, that I think it moſt probable to be ſo, but I can give you no Mathematical Demonſtrations for it: Onely this I am ſure of, That it is not impoſsible for the Omnipotent God; and he that queſtions the truth of it, may queſtion Gods Omnipotency. Truly, *Madam*, I wonder how man can ſay, God is Omnipotent, and can do beyond our Underſtanding, and yet deny all that he is not able to comprehend with his reaſon. However, as I ſaid, it is my opinion, That Matter is ſelf-moving by the power of God; Neither can Animadverſion, and Perception, as alſo the

variety

variety of Figures, prove, that there muſt be another external Agent or Power to work all this in Matter; but it proves rather the contrary; for were there no ſelf-motion in Matter, there would be no Perception, nor no variety of Creatures in their Figures, Shapes, Natures, Qualities, Faculties, Proprieties, as alſo in their Productions, Creations or Generations, Transformations, Compoſitions, Diſſolutions, and the *like*, as Growth, Maturity, Decay, *&c.* and for Animals, were not Corporeal Matter ſelf-moving, dividable and compoſable, there could not be ſuch variety of Paſsions, Complexions, Humors, Features, Statures, Appetites, Diſeaſes, Infirmities, Youth, Age, *&c.* Neither would they have any nouriſhing Food, healing Salves, ſoveraign Medicines, *reviving Cordials*, or deadly Poyſons. In ſhort, there is ſo much variety in Nature, proceeding from the ſelf-motion of Matter; as not poſsible to be numbred, nor thorowly known by any Creature: Wherefore I ſhould labour in vain, if I endeavoured to expreſs any more thereof; and this is the cauſe that I break off here, and onely ſubſcribe my ſelf;

MADAM,

Your faithful Friend

and Servant.

XXIII.

MADAM,

COncerning the compariſon, your *Author* makes between an Immaterial Spirit, and Light, That, *as Light is contractive and dilative, and yet not diviſible, ſo is alſo an Immaterial ſubſtance.* Give me leave to tell you, that in my opinion, all that is contractive and dilative, is alſo dividable, and ſo is light: As for example; when a Candle is ſnuff'd, the Snuffers do not onely clip the wick, but alſo the light: The like when a *dark body is interpoſed,* or croſſes the rays of the Sun; it cuts thoſe rays aſunder, which by reaſon they cannot joyn together again, becauſe of the interpoſed body, the *light* cut off, ſuddenly goeth out; that is, the matter of *light* is altered from the figure of *light,* to ſome other thing, but not annihilated: And ſince no more light can flow into the room from the Fountain or Spring of Light, the Sun, becauſe the paſſage is ſtopt cloſe, the room remaineth dark: For Light is ſomewhat of the nature of Water; ſo long as the Spring is open, the Water flows, and whatſoever is taken away, the Spring ſupplies; and if another body onely preſſes thorow it, it immediately joyns and cloſes its ſevered parts again, without any difficulty or loſs; The ſame doth Light, onely the difference is, that the ſubſtance of Light is extraordinary rare, and pure; for as Air is ſo much rarer then Water, ſo Light is ſo much rarer and purer then Air, and its matter may be of ſo dilating a

In the Append. to the Antid. c. 3. and Of the Immortality of the Soul, l. 1. c. 5.

nature, as to dilate from a point into numerous rayes. As for ordinary Fire-light, it doth not laſt longer, then it hath fuel to feed it, and ſo likewiſe it is with the light of the Sun; for Light is according to the ſubſtance that feeds it; and though it is a ſubſtance it ſelf; yet it increaſes and decreaſes, according as it hath ſomething that ſuccours or nouriſhes it. But ſome may object, that if Light were a body, and did contract and dilate, as I ſay, it is impoſsible that it could diſplay it ſelf in ſo great and vaſt a compaſs, and remove ſo ſuddenly and inſtantly as it doth. To which objection, I anſwer, firſt, That although I ſay, Light is a real corporeal ſubſtance, and doth contract and dilate it ſelf from a point into numerous rayes, as alſo in another Letter I ſent you before *, That Light and Darkneſs do ſucceed each other; neverthleſs, as for the perception of Light, I am not ſo eager in maintaining this opinion, as if it was an Infallible Truth, and impoſsible to be otherwiſe; but I ſay onely, That, to my ſenſe and reaſon, it ſeems very probable, that it may be ſo, that the light of the Sun doth really dilate it ſelf into ſo vaſt a compaſs as we ſee, and that light and darkneſs do really ſucceed each other, as all other Creatures do: But yet it ſeems alſo probable to mee, that the parts of the Air may onely pattern out the figure of light, and that the light we ſee in the Air may be onely patterns taken from the real figure of the light of the Sun: And therefore, if it be according to the former opinion, to wit, That the light of the Sun doth really dilate it ſelf into ſo vaſt a compaſs, My anſwer is, That contraction and dilation are natural corporeal actions or motions, and that there is no alteration of motion in Nature, but is done in Time, that is, ſuccel-

Sect. 1. Let. 20.

ſucceſsively, not inſtantly; for Time is nothing elſe but the alteration of motion: Beſides, I do not perceive any ſo ſudden and ſwift alteration and ſucceſsion of light, but that it is done by degrees: As for example; in the morning, when it begins to dawn and grow light, it appears clearly to our ſight how light doth come forth, and darkneſs remove by degrees; and ſo at night, when it grows dark, how light removes, and darkneſs ſucceeds; nay, if there be any ſuch ſudden change of the motions of Light, I deſire you to conſider, *Madam*, that light is a very ſubtil, rare, piercing and active body, and therefore its motions are much quicker then thoſe of groſſer bodies, and cannot ſo well be perceived by our groſs exterior ſenſes. But *if it be, that the Air doth pattern out the light of the* Sun, then the framed objection can prove nothing, becauſe there is not then ſuch a real dilation or ſucceſsion of light, but the corporeal figurative motions of the Air do make patterns of the light of the Sun, and diſſolve thoſe patterns or figures again, more ſuddenly and quickly then man can ſhut and open his eyes, as being more ſubtil then his groſs exterior ſenſes. But it may be ſaid, that if Air did pattern out the light of the Sun, the light would increaſe by theſe numerous patterns. I anſwer, that cannot appear to our Eyes; for we ſee onely the pattern'd figure of light, and that a great compaſs is enlightned; alſo that the further the air is from the Sun, the darker it is; nevertheleſs, I do verily believe, that the body of the Sun is far brighter then the light we ſee, and that the ſubſtance of light, and the patterns taken from light, are not one and the ſame, but very different. And thus much of light. As for Penetra-

tion,

tion, I conceive it to be nothing elſe but diviſion; as when ſome parts pierce and enter through other parts, as Duellers run each other thorow, or as water runs through a ſieve. And this is the opinion of,

MADAM,

Your faithful Friend,

and Servant.

XXIV.

MADAM,

HAving given you my opinion, both of the ſubſtance and perception of Light, in my laſt Letter, I perceive your deſire is to know how *Shadows* are made. Truly, *Madam*, to my ſenſe and reaſon, it appears moſt probable, that ſhadows are made by the way of patterning: As for example; when a Man's, or Trees, or any other the like Creature's ſhadow is made upon the Ground, or Wall, or the like; thoſe bodies, as the Ground, or Wall, do, in my opinion, pattern out the interpoſing body that is between the light and them: And the reaſon that the ſhadow is longer or ſhorter, or bigger or leſs, is according as the light is nearer or further off; for when the light is perpendicular, the interpoſing body cannot obſcure the light, becauſe the light ſurrounding the interpoſing body by its brightneſs, rather obſcures the body, then the body the light; for the numerous and ſplendorous patterns

terns of light taken from the body of the Sun, do quite involve the interpoſing body. Next, you deſire to know, *Whether the light we ſee in the Moon, be the Moons own natural light, or a borrowed light from the Sun*: I anſwer, that in my opinion, it is a borrowed light; to wit, that the Moon doth pattern out the light of the Sun: and the proof of it is, that when the Sun is in an Eclipſe, we do plainly perceive that ſo much of the Sun is darkned as the Moon covers; for though thoſe parts of the Moon, that are next the Sun, may, for any thing we know, pattern out the light of the Sun, yet the Moon is dark on that ſide which is from the Sun. I will not ſay, but that part of the Moon which is towards the Earth, may pattern out the Earth, or the ſhadow of the Earth, which may make the Moon appear more dark and ſullen; But when the Moon is in an Eclipſe, then it is plainly perceived that the Moon patterns out the Earth, or the ſhadow of the Earth. Beſides, thoſe parts of the Moon that are fartheſt from the Sun, are dark, as we may obſerve when as the Moon is in the Wane, and enlightened when the Sun is nearer. But I will leave this argument to obſerving Aſtrologers, and reſt,

MADAM,

Your faithful Friend

and Servant.

XXV.

MADAM,

IF acording to your *Authors* opinion, *In every particular world, ſuch as Man is eſpecially, his own Soul* (which is a Spirit) *be the peculiar and moſt perfective architect of the Fabrick of his Body, as the Soul of the world is of it*: Then I cannot conceive in my reaſon, how the ſeparation is made in death; for I ſee, that all animals, and ſo man-kind, have a natural deſire to live, and that life and ſoul are unwilling to part; And if the power lies in the Soul, why doth ſhe not continue with the Body, and animate, move and actuate it, as ſhe did before, or order the matter ſo, as not to diſſolve? But if the diſſolution lies in the body, then the body has ſelf-motion: Yet it is moſt probable, if the ſoul be the architect of the body, it muſt alſo be the diſſolver of it; and if there come not another ſoul into the parts of matter, the body muſt either be annihilated, or lie immoved as long as the world laſts, which is improbable; for ſurely all the bodies of men, or other animals, are imployed by Nature to ſome uſe or other: However, it is requiſite, that the ſoul muſt ſtay ſo long in the body, until it be turned into duſt and aſhes; otherwiſe, the body having no ſelf-motion, would remain as it was when the ſoul left it, that is, entire and undiſſolved: As for example; when a man dies, if there be no motion in his body, and the ſoul, which was the mover, be gone,

Of the Immortality of the Soul. l. 2. c. 10.

gone, it cannot poſsibly corrupt; for certainly, that we call corruption, is made by motion, and the body requires as much motion to be diſſolved or divided, as it doth to be framed or compoſed; Wherefore a dead body would remain in the ſame ſtate continually, if it had no ſelf-motion in it: And if another ſoul ſhould enter into the body, and work it to another figure, then certainly there muſt be much more ſouls then bodies, becauſe bodies are ſubject to change into ſeveral forms; but if the animal ſpirits, which are left in the body after the ſoul is gone, are able to diſſolve it without the help of the ſoul, then it is probable they could have fram'd it without the help of the ſoul; and ſo they being material, it muſt be granted, that matter is ſelf-moving: But if corporeal matter have corporeal ſelf-motion, a ſelf-moving Immaterial Spirit, by reaſon of their different natures, would make great obſtruction, and ſo a general confuſion; for the corporeal and incorporeal motions would hinder and oppoſe each other, their natures being quite different; and though they might ſubſiſt together without diſturbance of each other, yet it is not probable they ſhould act together, and that in ſuch a conjunction, as if they were one united body; for it is, in my opinion, more probable, that one material ſhould act upon another material, or one immaterial upon another immaterial, then that an immaterial ſhould act upon a material or corporeal. Thus the conſideration or contemplation of immaterial natural Spirits puts me always into doubts, and raiſes ſo many contradictions in my ſenſe and reaſon, as I know not, nor am not

able

able to reconcile them: However, though I am doubtful of them, yet I can aſſure your ſelf that I continue,

MADAM,

Your Faithful Friend

and Servant.

XXVI.

MADAM,

Of the Immortality of the Soul, l. 2. c. 10.

BY reaſon the *Soul is a Spirit,* and therefore *Contractible* and *Dilatable,* your *Authors* opinion is, That *it begins within leſs compaſs at firſt in organizing the fitly prepared matter, and ſo bears it ſelf on in the ſame tenour of work, till the body hath attained its full growth; and that the Soul dilates it ſelf in the dilating of the Body, and ſo poſſeſſes it through all the members thereof.* Truly, *Madam,* as for the contraction and dilation of an immaterial Spirit, if I heard never ſo many arguments, I ſhould hardly be able to conceive the poſsibility of it; For in my opinion, dilating and contracting are motions and actions of Nature, which belong to natural material Creatures, and to none elſe; for dilation and contraction cannot be without extenſion, but extenſion belongs to parts which an immaterial Spirit hath not: But ſuppoſe it be ſo, then the Soul muſt contract and dilate, extend and ſhrink together, and ſo grow leſs and bigger, according to the extenſion of the body;

body; and when the body dies, the ſoul, in my opinion, muſt contract to a very point; and if one part of the body die before the other, the ſoul muſt by degrees withdraw out of thoſe parts: alſo when a part of the body is cut off, the ſoul muſt needs contract, and grow leſs; the like when a man is let blood. Which contracting of the ſoul, by your *Authors* leave, doth ſeem, to my imagination, juſt like the contracting of Hodmandod into her ſhell. Beſides, if the ſoul be individable, and equally ſpread all over the body, then, to my opinion, ſhe muſt neceſſarily be of a human ſhape; and if the body be deformed, the ſoul muſt be deformed alſo; and if the body be caſually extended, as by taking *Poyſon into the body*, the *ſoul* muſt be ſo too, as being individable and *filling* every part; and if a man be born with ſix fingers or toes, the ſoul muſt be ſo too; or if a dwarf, the ſoul muſt be a dwarf alſo; and if he be born deaf and dumb, the ſoul muſt be ſo too. But if two *Twins*, as it may *fall out*, ſhould be born united *in* one body, I would fain know then, whether they would have two ſouls, or but one? As for example, if they ſhould have but one body, and one ſtomack, liver, heart, ſpleen, lungs, bowels, and yet have four legs, four hands, and two heads: It ſeems, to my opinion, that then two Immaterial Souls muſt be joyned as into one; neither do I know yet how this could well be, the monſter having but one body, nor how that Immaterial Soul can be divided, being inſeparably double, when the body dies. But, *Madam*, all this I ſpeak of the Natural Soul of Man, not of the Divine Soul, which is not ſubject to natural imperfections, and corporeal errors, being not made by Nature, but a ſuper-

natural and divine gift of the Omnipotent God, who ſurely will not give any thing that is not perfect. Wherefore it is not probable, this Divine Soul, being not ſubject to Nature, ſhould be an architect of the body, as having an higher and more divine imployment, *viz.* to fix her ſelf on her Creator, and being indued with ſupernatural faculties, and reſiding in the body in a ſupernatural manner; all which I leave to the Church: for I ſhould be loth to affirm any thing contrary to *their* Doctrine, or the Information of the holy Scripture, as grounding my *belief* onely upon the ſacred Word of God, and *its* true Interpretation made by the Orthodox Church; but not upon the opinions of particular perſons: for particular *mens opinions are not authentical,* being ſo *different and various, as a man* would be puzled *which* to adhere to. Thus, *Madam,* I avoid, as much as ever I can, not to mix Divinity *with* Natural Philoſophy; for I conſider, that ſuch a mixture would breed more *confuſion in the Church,* then do any good to either; witneſs the doctrine of the Soul of Man, whereof are ſo many different opinions: The onely cauſe, in my opinion, is, that men do not conceive the difference between the Divine, and Natural material Soul of Man, making them both as one, and mixing or confounding their faculties and proprieties, which yet are quite different; thus they *make* a Hodg-podg, Bisk or Olio of both; proving Divinity by Nature, and Faith by Reaſon; and bringing Arguments for Articles of Faith, and ſacred Myſteries out of Natural Arts and Sciences; whereas yet Faith and Reaſon are two contrary things, and cannot conſiſt together; according to the Proverb, Where

Reaſon

Reaſon ends, Faith begins. Neither is it poſsible that Divinity can be proved by Mathematical Demonſtrations; for if Nature be not able to do it, much leſs is Art: Wherefore it is inconvenient to mix ſupernatural Spirits with Air, Fire, Light, Heat, Cold, *&c.* and to apply corporeal actions and qualities to them; and the Divine Soul, with the Brain, Blood, Fleſh, Animal Spirits, Muſcles, Nerves, Bones, *&c.* of Man; all which makes a confuſion betwixt the Mind or Natural Soul of Man, and the Supernatural and Divine Soul inſpired into him by God; for both their faculties and proprieties are different, and ſo are their effects, as proceeding from ſo different cauſes. And therefore, *Madam,* as for Divinity, I pray devoutly, and believe without diſputing; but as for Natural Philoſophy, I reaſon freely, and argue without believing, or adhering to any ones particular opinion, which I think is the beſt and ſafeſt way to chooſe for,

MADAM,

Your faithful Friend,

and Servant.

XXVII.

MADAM,

YOur *Author* in the continuation of his diſcourſe concerning the Immaterial Soul of Man, demonſtrating, that her ſeat is not bound up in a certain place of the body, but that ſhe pervades all the body and every

every part thereof, takes, amongſt the reſt, an argument from Paſsions and Sympathies: *Moreover*, ſays he, *Paſsions and Sympathies, in my judgment, are more eaſily to be reſolved into this hypotheſis of the Soul's pervading the whole Body, then in reſtraining its eſſential preſence to one part thereof.—But it is evident that they ariſe in us againſt both our will and appetite; For who would bear the tortures of fears and jelouſies, if he could avoid it?* Concerning Paſsions, *Madam*, I have given my opinion at large in my Book of Philoſophy, and am of your *Authors* mind, that Paſsions are made in the Heart, but not by an Immaterial ſpirit, but by the Rational ſoul which is material; and there is no doubt, but that many Paſsions, as Fear, *Jealouſie, &c.* ariſe againſt our will and appetite; for ſo may forreign Nations invade any Kingdom without the will or deſire of the Inhabitants, and yet they are corporeal men: The ſame may be ſaid of Paſsions; and ſeveral parts of matter may invade each other, whereof one may be afraid of the other, yet all this is but according as corporeal matter moves, either Generally, or Particularly: Generally, that is, when many parts of Matter unite or joyn together, having the like appetites, wills, deſigns; as we may obſerve, that there are general agreements amongſt ſeveral parts, in Plagues, as well as Wars, which Plagues are not onely amongſt Men, but amongſt Beaſts; and ſometimes but in one ſort of animals, as a general Rot amongſt Sheep, a general Mange amongſt Dogs, a general Farcy amongſt Horſes, a general Plague amongſt Men; all which could not be without a general Infection, one part infecting another, or rather one part imitating the motions of the other,

Immort. of the Soul. Book. 2. c. 10.

that

that is next adjoyning to it; for ſuch infections come by the neer adheſion of parts, as is obſervable, which immaterial and individable natural Spirits could not effect; that is, to make ſuch a general infection in ſo many ſeveral parts of ſo many ſeveral Creatures, to the Creatures diſſolution: Alſo there will be ſeveral Invaſions at one time, as Plague, and War, amongſt neighbouring and adjoining Creatures or Parts. But this is to be obſerved, That the ſenſitive corporeal motions make all diſeaſes, and not the Rational, although the Rational are many times the occaſion, that the ſenſitive do move into ſuch or ſuch a diſeaſe; for all thoſe that are ſick by conceit, their ſickneſſes are cauſed by the rational corporeal motions. But being loth to make tedious repetitions hereof, having diſcourſed of diſeaſes and paſsions in my mentioned Book of *Philoſophy*, I will refer you thither, and reſt,

MADAM,

Your Faithful Friend

and Servant.

XXVIII.

MADAM,

COncerning *Dimneſs* of *Sight*, which your *Author* will have to *proceed from the deficiency of the Animal Spirits*, My meaning in ſhort is, That when ſight is dim, though the ſenſitive organs are perfect, *Immort. of the Soul. Book 2. ch. 8.*

this dimneſs is cauſed by the alteration onely of the ſenſitive motions in the organs, not moving to the nature of ſight. And ſo is made Deafneſs, Dumbneſs, Lameneſs, and the like, as alſo Wearineſs; for the Relaxation of ſtrength in ſeveral parts, is onely an alteration of ſuch ſorts of motions which make the nerves ſtrong; and if a man be more dull at one time, then at another, it is that there are not ſo many changes of motions, nor ſo quick motions at that time, as at another; for Nature may uſe more or leſs force as ſhe pleaſes: *Alſo* ſhe can and doth often uſe oppoſite actions, and often ſympathetical and agreeable actions, as ſhe pleaſes; for Nature having a free power to move, may move as ſhe will; but being wiſe, ſhe moves as ſhe thinks beſt, either in her ſeparating or uniting motions, *for continuance*, as well as for variety. But *if*, according to your *Author*, the Immaterial Soul ſhould determinate matter in motion, it would, in my opinion, make a *confuſion*; for the motions of the Matter would often oppoſe and croſs the motions of the *Immaterial* Soul, and ſo they would diſagree, as a King and his Subjects, (except God had given the Soul an abſolute power of command, and reſtrained matter to an irriſiſtible and neceſsitated obedience; which, in my opinion, is not probable:) By which diſagreement, Nature, and all that is in Nature, would have been quite ruined at this time; for no kinds, ſorts, or particulars, would keep any diſtinction, if Matter did not govern it ſelf, and if all the parts did not know their own affairs, abilities, offices, and functions: Beſides, it would, to my thinking, take up a great deal of time, to receive commands in every ſeveral action, at leaſt ſo much, that

for example, a man could not have ſo many ſeveral thoughts in ſo ſhort a time, as he hath. But concerning the Animal Spirits, which your *Author* calls the Inſtruments, Organs and Engines of the Incorporeal Soul; I would fain know, whether they have no motion but what comes from the Soul, or whether they have their own motion of themſelves? If the firſt, then the Soul muſt, in my opinion, be like a Deity, and have a divine Power, to give and impart Motion; if the ſecond, then the ſpirits being material, it follows that Matter hath motion of it ſelf, or is ſelf-moving; But if the Immaterial natural Soul can transfer her gifts upon corporeal matter, then it muſt give numerous ſorts of motions, with all their degrees; as alſo the faculty of figuring, or moving figuratively in all corporeal Matter: Which power, in my judgment, is too much for a Creature to give. If you ſay, the Immaterial Soul hath this power from God; I anſwer, Matter may have the ſame; and I cannot imagine why God ſhould make an Immaterial Spirit to be the Proxy or Vice-gerent of his Power, or the *Quarter-maſter General of his Divine Providence*, as your *Author* is pleaſed to ſtyle it, when he is able to effect it without any Under-Officers, and in a more eaſie and compendious way, as to impart immediately ſuch ſelf-moving power to Natural Matter, which man attributes to an Incorporeal Spirit. But to conclude, if the Animal Spirits be the Inſtruments of the Incorporeal Soul, then the Spirits of Wine are more powerfull then the Animal Spirits; nay, then the Immaterial Soul her ſelf; for they can put them and all their actions quite

Immort. of the Soul. Book 3. c. 13.

out

out of order: the ſame may be done by other material things, Vegetables, Minerals, and the like. And ſo leaving this diſcourſe to your better conſideration, I take my leave for this time, and reſt,

MADAM,

Your faithful and affectionate Friend,

and Servant.

XXIX.

MADAM,

TOuching *the State or Condition of the Supernatural and Divine Soul, both in, and after this life,* I muſt crave your excuſe that I can give no account of it; for I dare affirm nothing; not onely that I am no profeſſed Divine, and think it unfit to take any thing upon me that belongs not to me, but alſo that I am unwilling to mingle Divinity and Natural Philoſophy together, to the great diſadvantage and prejudice of either; for if each one did contain himſelf within the circle of his own Profeſsion, and no body did pretend to be a Divine Philoſopher, many abſurdities, confuſions, contentions, and the like, would be avoided, which now diſturb both Church and Schools, and will in time cauſe their utter ruine and deſtruction; For what is Supernatural, cannot naturally be known by any natural Creature; neither can any ſupernatural Creature, but the Infinite and Eternal God, know thorowly

thorowly every thing that is in Nature, ſhe being the Infinite ſervant of the Infinite God, whom no finite Creature, of what degree ſoever, whether natural or ſupernatural, can conceive; for if no Angel nor Devil can know our thoughts, much leſs will they know Infinite Nature; nay, one finite ſupernatural Creature cannot, in my opinion, know perfectly another ſupernatural Creature, but God alone, who is all-knowing: And therefore all what is ſaid of ſupernatural Spirits, I believe, ſo far as the Scripture makes mention of them; further I dare not preſume to go; the like of the ſupernatural or divine Soul: for all that I have writ hitherto to you of the Soul, concerns the natural Soul of Man, which is material, and not the ſupernatural or divine Soul; *neither do I contradict any thing concerning this divine* ſoul, but I am onely againſt thoſe opinions, which make the natural ſoul of man an immaterial natural ſpirit, and confound ſupernatural Creatures with natural, believing thoſe ſpirits to be as well natural Creatures and parts of Nature, as material and corporeal beings are; when as there is great difference betwixt them, and nothing in Nature to be found, but what is corporeal. Upon this account I take all their relations of Dæmons, of the Genii, and of the Souls after the departure from humane Bodies, their Vehicles, Shapes, Habitations, Converſes, Conferences, Entertainments, Exerciſes, Pleaſures, Paſtimes, Governments, Orders, Laws, Magiſtrates, Officers, Executioners, Puniſhments, and the like; rather for Poetical Fictions, then Rational Probabilities; containing more Fancy, then Truth and Reaſon, whether they concern the divine or natural Soul: for as for the divine Soul, the Scripture

makes no other mention of it, but that immediately after her departure out of this natural life, ſhe goeth either to Heaven or Hell, either to enjoy Reward, or to ſuffer Puniſhment, according to man's actions in this life. But as for the Natural Soul, ſhe being material, has no need of any Vehicles, neither is natural death any thing elſe but an alteration of the rational and ſenſitive motions, which from the diſſolution of one figure go to the formation or production of another. Thus the natural ſoul is not like a Traveller, going out of one body into another, neither is air her lodging; for certainly, if the natural humane ſoul ſhould travel through the airy regions, ſhe would at laſt grow weary, it being ſo great a journey, except ſhe did meet with the ſoul of a Horſe, and ſo eaſe her ſelf with riding on Horſe-back. Neither can I believe Souls or Dæmons in the Air have any Common-wealth, Magiſtrates, Officers and Executioners in their airy Kingdom; for whereſoever are Governments, Magiſtrates and Executioners, there are alſo Offences, and where there is power to offend, as well as to obey, there may and will be ſometimes Rebellions and Civil Wars; for there being different ſorts of Spirits, it is impoſsible they ſhould all ſo well agree, eſpecially the good and evil Genii, which certainly will fight more valiantly then *Hector* and *Achilles*, nay, the Spirits of one ſort would have more Civil Wars then ever the *Romans* had; and if the Soul of *Cæſar* and *Pompey* ſhould meet, there would be a cruel fight between thoſe two Heroical ſouls; the like between *Auguſtus's* and *Antonius's* Soul. But, *Madam*, all theſe, as I ſaid, I take for fancies proceeding from the Religion of the Gentiles, not fit for Chriſtians

to

to embrace for any truth; for if we ſhould, we might at laſt, by avoiding to be Atheiſts, become Pagans, and ſo leap out of the Frying-pan into the Fire, as turning from Divine Faith to Poetical Fancy; and if *Ovid* ſhould revive again, he would, perhaps, be the chief head or pillar of the Church. By this you may plainly ſee, *Madam*, that I am no Platonick; for this opinion is dangerous, eſpecially for married Women, by reaſon the converſation of the Souls may be a great temptation, and a means to bring Platonick Lovers to a neerer acquaintance, not allowable by the Laws of Marriage, although by the ſympathy of the *Souls*. But I conclude, and deſire you, not to interpret amiſs this my diſcourſe, as if I had been too invective againſt Poetical Fancies; for that I am a great lover of them, my Poetical Works will witneſs; onely I think it not fit to bring Fancies into Religion: Wherefore what I have writ now to you, is rather to expreſs my zeal for God and his true Worſhip, then to prejudice any body; and if you be of that ſame Opinion, as above-mentioned, I wiſh my Letter may convert you, and ſo I ſhould not account my labour loſt, but judg my ſelf happy, that any good could proceed to the advancement of your *Soul*, from,

MADAM

Your faithful Friend

and Servant.

MA-

XXX.

MADAM,

I Sent you word in my laſt, I would not meddle with writing any thing of the Divine Soul of Man, by reaſon it belongs to Faith and Religion, and not to Natural Philoſophy; but ſince you deſire my opinion concerning the Immortality of the Divine Soul, I cannot but anſwer you plainly, that firſt I did wonder much you made queſtion of that, whoſe truth, in my opinion, is ſo clear, as hardly any rational man will make a doubt of it; for I think there is almoſt no Chriſtian in the world, but believes the Immortality of the Soul, no not Chriſtians onely, but Mahometans and Jews: But I left to wonder at you, when I ſaw Wiſe and Learned Men, and great Divines, take ſo much pains as to write whole Volumes, and bring ſo many arguments to prove the Immortality of the Soul; for this was a greater Miracle to me, then if Nature had ſhewed me ſome of her ſecret and hidden effects, or if I had ſeen an Immaterial Spirit. Certainly, *Madam*, it ſeems as ſtrange to me to prove the Immortality of the Soul, as to convert Atheiſts; for it impoſsible, almoſt, that any Atheiſt ſhould be found in the World: For what Man would be ſo ſenceleſs as to deny a God? Wherefore to prove either a God, or the Immortality of the Soul, is to make a man doubt of either: for as Phyſicians and Surgeons apply ſtrengthening Medicines onely to thoſe parts of the body which they ſuppoſe

the

the weakeſt, ſo it is with proofs and arguments, thoſe being for the moſt part uſed in ſuch ſubjects, the truth of which is moſt queſtionable. But in things Divine, Diſputes do rather weaken Faith, then prove Truth, and breed ſeveral ſtrange opinions; for Man being naturally ambitious, and endeavouring to excel each other, will not content himſelf with what God has been pleaſed to reveal in his holy Word; but invents and adds ſomething of his own; and hence ariſe ſo many monſtrous expreſsions and opinions, that a ſimple man is puzzled, not knowing which to adhere to; which is the cauſe of ſo many ſchiſmes, ſects, and diviſions in Religion: Hence it comes alſo, that ſome pretend to know the very nature and eſſence of God, *his* divine Counſels, all his Actions, Deſigns, Rules, Decrees, Power, Attributes, nay, his Motions, Affections, and Paſsions, as if the Omnipotent Infinite God were of a humane ſhape; ſo that there are already more diviſions then Religions, which diſturb the peace and quiet both of mind and body; when as the ground of our belief conſiſts but in ſome few and ſhort Articles, which clearly explained, and the moral part of Divinity well preſſed upon the People, would do more good, then unneceſſary and tedious diſputes, which rather confound Religion, then advance it: but if man had a mind to ſhew Learning, and exerciſe his Wit, certainly there are other ſubjects, wherein he can do it with more profit, and leſs danger, then by proving Chriſtian Religion by Natural Philoſophy, which is the way to deſtroy them both. I could wiſh, *Madam*, that every one would but obſerve the Command of Chriſt, and give to God

what is Gods, and to *Cæſar* what is *Cæſars*, and ſo diſtinguiſh what belongs to the actions of Nature, and what to the actions of Religion; for it appears to my Reaſon, that God hath given Nature, his eternal Servant, a peculiar freedom of working and acting, as a ſelf-moving Power from Eternity; but when the Omnipotent God acts, he acts ſupernaturally, as beyond Nature; of which divine actions none but the holy Church, as one united body, mind and ſoul, ſhould diſcourſe, and declare the truth of them, according to the Revelation made by God in his holy Word, to her Flock the Laity, not ſuffering any one ſingle perſon, of what profeſsion or degree ſoever, indifferently to comment, interpret, explain, and declare the meaning or ſenſe of the Scripture after his own fancy. And as for Nature's actions, let thoſe whom Nature hath indued with ſuch a proportion of Reaſon, as is able to ſearch into the hidden cauſes of natural effects, contemplate freely, without any reſtraint or confinement; for Nature acts freely, and ſo may natural Creatures, and amongſt the reſt Man, in things which are purely natural; but as for things ſupernatural, man cannot act freely, by reaſon they are beyond his ſphere of conception and underſtanding, ſo as he is forced to ſet aſide Reaſon, and onely to work by Faith. And thus, *Madam*, you ſee the cauſe why I cannot give you a full deſcription of the Divine Soul of Man, as I mentioned already in my laſt, but that I do onely ſend you my opinion of the natural ſoul, which I call the rational ſoul; not that I dare ſay, the ſupernatural ſoul is without natural reaſon, but natural reaſon is not the divine ſoul; neither can natural reaſon, without Faith, advance the divine ſoul

to

to Heaven, or beget a pious zeal, without divine and ſupernatural Grace: Wherefore Reaſon, or the rational Soul is onely the Soul of Nature, which being material, is dividable, and ſo becomes numerous in particular natural Creatures; like as the ſenſitive life being alſo material and dividable, becomes numerous, as being in every Creature, and in every part of every Creature; for as there is life in every Creature, ſo there is alſo a ſoul in every Creature; nay, not onely in every Creature, but in every particle of every Creature, by reaſon every Creature is made of rational and ſenſitive Matter; and as all Creatures or parts of Nature are but one infinite body of Nature, ſo all their particular ſouls and lives make but one infinite ſoul and life of Nature; *and this natural ſoul hath onely natural actions, not ſupernatural; nor has the ſupernatural ſoul natural actions;* for although they ſubſiſt both together in one body, yet each works without diſturbance to the other; and both are Immortal; for of the ſupernatural ſoul *there is no queſtion, and of the natural ſoul, I have ſaid before,* that nothing is periſhable or ſubject to annihilation in nature, and ſo no death, but what is called by the name of death, is onely an alteration of the corporeal natural motions of ſuch a figure to another figure; and therefore as it is impoſsible, that one part of Matter ſhould periſh in Nature, ſo is it impoſsible, that the natural or rational ſoul can periſh, being material: The natural humane ſoul may alter, ſo as not to move in an animal way, or not to have animal motions, but this doth not prove her deſtruction or annihilation, but onely a change of the animal figure and its motions, all remaining ſtill in Nature. Thus my Faith of the Di-

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vine, and my opinion of the Natural Soul, is, that they are both Immortal; as for the immediate actions of the Divine Soul, I leave you to the Church, which are the Miniſters of God, and the faithful diſpenſers of the ſacred myſteries of the Goſpel, the true Expounders of the Word of God, Reformers of mens lives, and Tutors of the Ignorant, to whom I ſubmit my ſelf in all that belongs to the ſalvation of my Soul, and the regulating of the actions of my life, to the honour and glory of God. And I hope they will not take any offence at the maintaining and publiſhing my opinions concerning Nature and Natural effects, for they are as harmleſs, and as little prejudicial to them, as my deſigns; for my onely and chief deſign is, and ever hath been to underſtand Nature rightly, obey the Church exactly, Believe undoubtedly, Pray zealouſly, Live vertuouſly, and Wiſh earneſtly, that both Church and Schools may increaſe and flouriſh in the ſacred knowledg of the true Word of God, and that each one may live peaceable and happily in this world, die quietly, and riſe bleſſedly and glorioufly to everlaſting Life and happineſs: Which happineſs I pray God alſo to confer upon your Ladiſhip; Till then, I reſt,

MADAM,

Your faithful and conſtant

Friend, to ſerve you.

XXXI.

MADAM,

I Will leave the Controverſie of Free-Will and Neceſsity, which your *Author* is diſcourſing of, to Divines to decide it, onely I ſay this, that Nature hath a natural Free-will and power of ſelf-moving, and is not neceſsitated; but yet that this Free-will proceeds from God, who hath given her both will and power to act freely. But as for the queſtion, whether there be nothing in the Univerſe, but meer body? I anſwer, My opinion is not, that there is nothing in the world but meer Body; but that Nature is purely material or corporeal, and that there is no part of Nature, or natural Creature, which is not Matter, or Body, or made of Matter; alſo, that there is not any thing elſe mixt with body, as a copartner in natural actions, which is diſtinct from Body or Matter; nevertheleſs, there may be ſupernatural ſpiritual beings or ſubſtances in Nature, without any hinderance to Matter or corporeal Nature. The ſame I may ſay of the natural material, and the divine and ſupernatural Soul; for though the divine Soul is in a natural body, and both their powers and actions be different, yet they cauſe no ruine or diſturbance to each other, but do in many caſes agree with each other, without incroachment upon each others powers or actions; for God, as he is the God of all things, ſo the God of Order. Wherefore it is not probable, that created Immaterial or Incorporeal beings

Of the Immortality of the Soul. l. 1. c. 3.

Lib. 2. c. 2.

ſhould order Corporeal Nature, no more then Corporeal Nature orders Immaterial or Incorporeal Creatures. Neither can, in my opinion, Incorporeal Creatures be clearly conceived by Corporeals, although they may really exiſt and ſubſiſt in Nature; onely, as I ſaid before, it is well to be conſidered, that there is difference betwixt being in Nature, and being a part of Nature; for bodileſs things, and ſo ſpiritual ſubſtances, although they may exiſt in Nature, yet they are not natural, nor parts of Nature, but ſupernatural, Nature being meerly corporeal, and Matter the ground of Nature; and all that is not built upon this material ground, is nothing in Nature. But you will ſay, The divine Soul is a part of Man, and Man a part of Nature; wherefore the divine *Soul* muſt needs be a part of Nature. I anſwer, Not: For the divine Soul is not a part of Nature, but ſupernatural, as a ſupernatural Gift from God onely to Man, and to no other Creature: and although in this reſpect it may be called a part of Man, yet *it is no natural* or material part of Man; neither doth this ſupernatural Gift diſturb Nature or natural Matter, or natural Matter this ſupernatural Giſt. And ſo leaving them both, I reſt,

MADAM,

Your faithful Friend

and Servant.

XXXII.

MADAM,

IF you deſire my opinion concerning Witches, whereof your Learned *Author* hath many Diſcourſes and Stories: I will tell you really, that in my ſenſe and reaſon, I do not believe any, except it be the witch of *Endor*, which the Scripture makes mention of; for though I believe that there is a Devil, as the Word of God and the Church inform me, yet I am not of the opinion, that God ſhould ſuffer him to have ſuch a familiar conjunction, and make ſuch contracts with Man, as to impower him to do miſchief and hurt to others, or to foretell things to come, and the like; for I believe that all things Immaterial, as Spirits, Angels, Devils, and the divine Soul of Man, are no parts of Nature, but Supernatural, Nature knowing of no Creature that belongs to her, but what is material; and ſince incorporeal Creatures are no parts of Nature, they neither have natural actions, nor are they concerned as co-partners or co-agents in the actions of Nature and natural Creatures; but as their ſubſtances, ſo their actions are ſupernatural, and beyond our conceivement. As for Faires, I will not ſay, but there may be ſuch Creatures in Nature, and have airy bodies, and be of a humane ſhape, and have humane actions, as I have deſcribed in my Book of Poems; for there are many things in Nature, whereof Man hath no knowledg at all,

Antid. lib. 3.

all, and it would be a great folly for any one to deny what he doth not ſee, or to aſcribe all the unuſual effects in Nature to Immaterial Spirits; for Nature is ſo full of variety, that ſhe can and doth preſent ſometimes ſuch figures to our exterior ſenſes, as are not familiar to us, ſo as we need not to take our refuge to Immaterial Spirits: nay, even thoſe that are ſo much for Incorporeal Spirits, muſt confeſs, that they cannot be ſeen in their own natures, as being Inviſible, and therefore have need to take vehicles of ſome groſſer bodies to manifeſt themſelves to men: and if Spirits cannot appear without bodies, the neereſt way is to aſcribe ſuch unuſual effects or apparitions, as happen ſometimes, rather to matter that is already corporeal, and not to go ſo far as to draw Immaterial Spirits to Natural actions, and to make thoſe Spirits take vehicles fit for their purpoſes: for Nature takes ſometimes delight in unuſual Varieties. Concerning thoſe ſtories which your *Author* relates * of the ſtrange effects of Food received into a mans body, how they did work upon the Imagination, and change and transform the humors of thoſe that did feed upon them, thoſe, I ſay, ſeem very probable to me. As for example; of a *Wench who being ſtruck into an Epilepſy, upon the ſeeing of a Malefactors Head cut off, was adviſed to drink Cats-blood; which being done, ſhe not long after degenerated into the nature and property of that Animal, cried and jump'd like a Cat, and hunted Mice with the ſame ſilence and watchfulneſs as they do. Then of a Man, being long fed with Swines-blood, which took a ſpecial pleaſure in wallowing and tumbling himſelf in the mire. Alſo of another*

* *In his diſcourſe of Enthuſiaſm. Sect.*

a Girle, which being nouriſhed up with Goats-milk, would skip like a Goat, and brouze on Trees as Goats uſe to do. And of a Man, who by eating the brains of a Bear, became of a Bear-like diſpoſition. All theſe ſtories I believe to be true; for naturally the motions of a Man may ſometimes ſympathize ſo much with the received food, as to make an alteration in his humour or diſpoſition. But although it be natural, yet it is not regular, at leaſt not uſual, but proceeds from an irregular and unuſual change of motions, like as the conception and generation of a Monſter; For if it were ordinary, then thoſe which drink much of the blood of beaſts, would alſo degenerate into a beaſtly nature, the contrary whereof is ſufficiently known: Likewiſe thoſe that drink much of Cows-milk, would change into their humors and natures. But certainly, ſome kinds of meats do not onely cauſe ſickneſs, but madneſs, and ſtrange Imaginations; all which unnatural or unuſual accidents are cauſed by Matter's irregular motions; Whereof I have declared my opinion in other places; and ſo I reſt,

MADAM,

Your faithful and conſtant

Friend, to ſerve you.

XXXIII.

MADAM,

YOu will have my opinion of the Book that treats of *the Pre-exiſtence of Souls*, and the *Key that unlocks the Divine Providence*; but I have told you heretofore, that there are ſo many different opinions concerning the Soul, as I do not know which to embrace, for the multiplicity confounds my choice: and the cauſe of theſe various opinions, in my ſimple judgment, is, that moſt men make no difference between the Divine, and Natural Soul. As for the Natural Soul, humane ſenſe and reaſon may perceive, that it conſiſts of Matter, as being Material; but as for the Divine Soul, being not material, no humane ſenſe and reaſon is able naturally to conceive it; for there cannot poſsibly be ſo much as an Idea of a natural nothing, or an immaterial being, neither can ſenſe and reaſon naturally conceive the Creation of an Immaterial ſubſtance; for as the Creation of material Creatures, as of this World, belongs to Faith, and not to Reaſon, ſo doth alſo the Creation of Immaterial ſubſtances, as Spirits; nay, it is more difficult to underſtand a Natural Nothing to be made out of nothing, then a Natural Something out of nothing. And as for the *Progreſs of Immaterial Souls*, which the ſame *Author* mentions, I cannot conceive how No-thing can make a Progreſs, and therefore I ſuppoſe, it is an Improper, or Metaphorical expreſsion. The truth is, what is Immaterial,

terial, belongs not to a Natural knowledg or underſtanding, but is Supernatural, and goes beyond a natural reach or capacity. Concerning *the Key of Divine Providence*, I believe God did never give or lend it to any man; for ſurely, God, who is infinitely Wiſe, would never intruſt ſo frail and fooliſh a Creature as Man, with it, as to let him know his ſecret Counſels, Acts, and Decrees. But ſetting aſide Pride and Preſumption, Senſe and Reaſon may eaſily perceive, that Man, though counted the beſt of Creatures, is not made with ſuch infinite Excellence, as to pierce into the leaſt ſecrets of God; Wherefore I am in a maze when I hear of ſuch men, which pretend to know ſo much, as if they had plundered the Celeſtial Cabinet of the Omnipotent God; for certainly, had they done it, they could not pretend to more knowledg then they do. But I, *Madam*, confeſs my Ignorance, as having neither divine Inſpirations, nor extraordinary Viſions, nor any divine or humane learning, but what Nature has been pleaſed to beſtow upon me: Yet in all this Ignorance, I know that I am, and ought to be,

MADAM,

Your humble and

faithful Servant.

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XXXIV.

MADAM,

SInce in my former Letters I have diſcourſed of Immaterial Spirits, and declared my meaning, that I do not believe them to be natural Creatures, or parts of Nature; you are of opinion, as if I did contradict my ſelf, by reaſon that in the firſt Edition of my Book called *Philoſophical Opinions*, I name the rational and ſenſitive Matter, rational and ſenſitive Spirits. To which I anſwer, firſt, That when I did write my firſt Conceptions in Natural Philoſophy, I *was not ſo* experienced, nor had I thoſe obſervations which I have had ſince; Neither did I give thoſe firſt Conceptions time to digeſt, and come to a maturity or perfect growth, but forced them forth as ſoon as conceived, and this made the firſt publiſhing of them ſo full of Imperfections, which I am much ſorry for; But ſince that time, I have not onely reviewed, but corrected and altered them in ſeveral places, ſo that the laſt Impreſsion of my *Philoſophical Opinions*, you will find more perfect and exact then the former. Next, I pray you to take notice, *Madam*, that in the mentioned firſt Edition, by the word Spirits, I meant Material, not Immaterial Spirits; for obſerving, that Learned Men do diſcourſe much of Animal Spirits, which are Material, and that alſo high extracts in Chymiſtry are called Spirits; I uſed that word purpoſely, thinking it moſt proper and convenient to expreſs my ſenſe and meaning of that

that degree of matter which I call rational and ſenſitive. But conſidering again, that my opinions, being new, would be ſubject to miſapprehenſions and mis-interpretations; to prevent thoſe, I thought it fitter to leave out the word *Spirits* in the ſecond, as alſo in the laſt Edition of my named Book of *Philoſophy*, leſt my Readers ſhould think I meant Immaterial Spirits; for I confeſs really, that I never underſtood, nor cannot as yet apprehend Immaterial Spirits; for though I believe the Scripture, and the Church, that there are Spirits, and do not doubt the exiſtency of them, yet I cannot conceive the nature of Immaterial Spirits, and what they are; Wherefore I do onely treat of natural material ſubſtances, and not of incorporeal; alſo my diſcourſe is of the *Infinite* ſervant of the Infinite God, which ſervant is corporeal or material Nature: God is onely to be admired, adored, and worſhipped; but not unglorioufly to be diſcourſed of; Which Omnipotent God, I pray of his Infinite Mercy to give me Faith to believe in him, and not to let preſumption prevail with me ſo, as to liken vain and idle conceptions to that Incomprehenſible Deity. Theſe, *Madam*, are my humble Prayers to God; and my requeſt to you is, that I may continue the ſame in your love and affection, which I have been hitherto; ſo ſhall I live content, and reſt,

MADAM,

Your faithful Friend

and Servant.

SECT. III.

I.

MADAM,

Have diſcharged my duty thus far, that in obedience to your commands, I have given you my anſwers to the opinions of three of thoſe famous and learned *Authors* you ſent me, *viz.* *Hobbes*, *Des Cartes*, and *More*, and explained my own opinions by examining theirs; My onely task ſhall be now to proceed in the ſame manner with that famous *Philoſopher* and Chymiſt, *Van Helmont*; But him I find more difficult to be underſtood then any of the forementioned, not onely by reaſon of the Art of Chymiſtry, which I confeſs my ſelf not verſed in, but eſpecially, that he has ſuch ſtrange terms and unuſual expreſsions as may puzle any body to apprehend the ſenſe and meaning of them: Wherefore, if you receive not that full ſatisfaction you expect from me, in examining his opinions

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and arguments, I beg your pardon before-hand, and deſire you to remember, that I ſent you word in the beginning, I did undertake this work more out of deſire to clear my own opinions, then a quarrelſome humor to contradict others; which if I do but obtain, I have my aim. And ſo to the buſineſs: When as your *Author* diſcourſes of the cauſes and beginnings of Natural things, he is pleaſed to ſay, That *Souls and Lives, as they know no Degrees, ſo they know no Parts*; which opinion is very different from mine: For although I confeſs, that there is but one kind of Life, and one kind of Soul in Nature, which is the ſenſitive Life, and the rational Soul, both conſiſting not onely of Matter, but of one kind of Matter, to wit, Animate; nevertheleſs they are of different degrees, the matter of the rational Soul being more agil, ſubtil and active, then the matter of the ſenſitive Life; which is the reaſon that the rational can act in its own ſubſtance or degree of matter, and make figures in it ſelf, and its own parts; when as the ſenſitive, being of ſomewhat a groſſer degree then the rational, and not ſo ſubtil and active, is confined to work with and upon the Inanimate matter. But miſtake me not, *Madam*, for I make onely a difference of the degrees of Subtilty, Activity, Agility, Purity, betwixt rational and ſenſitive Matter; but as for the rational Matter it ſelf, it has no degrees of Purity, Subtilty and Activity in its own Nature or Parts, but is always one and the ſame in its ſubſtance in all Creatures, and ſo is the ſenſitive. You will ask me, How comes then the difference of ſo many Parts and Creatures in Nature, if there be no degrees of Purity, Activity, and Subtilty in the ſubſtance of the rational, and in the ſubſtance

Van Helm. *in his Book intituled,* Phyſick Refined, *ch.* 4. *of the Cauſes and beginning of natural things.*

ſtance of the ſenſitive Matter? As for example: if there were no ſuch degrees of the Parts of rational Matter amongſt themſelves, as alſo of the Parts of the ſenſitive, there would be no difference betwixt Animals, Vegetables, Minerals, and Elements, but all Creatures would be alike without diſtinction, and have the ſame manner of ſenſe and reaſon, life and knowledg. I anſwer, That although each ſort or degree of animate Matter, rational as well as ſenſitive, has in it ſelf or its own ſubſtance no degrees of purity, rarity, and ſubtilty, but is one and the ſame in its nature or eſſence; nevertheleſs, each has degrees of quantity, or parts, which degrees of quantity do make the onely difference betwixt the ſeveral creatures or parts of Nature, as well in their general, as particular *kinds*; for both the rational and ſenſitive matter being corporeal, and ſo dividable into parts, ſome creatures do partake more, ſome leſs of them, which makes them to have more or leſs, and ſo different ſenſe and reaſon, each according to the nature of its *kind*: Nay this difference of the degrees of quantity or parts in the ſubſtance of the rational and ſenſitive Matter, makes alſo the difference betwixt particulars in every ſort of Creatures, as for example, between ſeveral particular Men: But as I ſaid, the nature or eſſence of the ſenſitive and rational Matter is the ſame in all; for the difference conſiſts not in the Nature of Matter, but onely in the degrees of quantity, and parts of Matter, and in the various and different actions or motions of this ſame Matter. And thus Matter being dividable, there are numerous lives and ſouls in Nature, according to the variouſneſs of her ſeveral Parts and Creatures. Next your *Author*, mentioning

ing the *Cauſes and Principles of natural Bodies*, aſsigns two firſt or chief beginnings and corporeal cauſes of every Creature, to wit, the *Element of Water*, and the *Ferment or Leaven*; which Ferment he calls a formal created being; neither a ſubſtance, nor an accident, but a neutral thing. Truly, *Madam*, my reaſon is not able to conceive this neutral Being; for it muſt either be ſomething or nothing in Nature: and if he makes it any thing betwixt both, it is a ſtrange Monſter, and will produce monſtrous effects: and as for Water, if he doth make it a Principle of Natural things, I ſee no reaſon why he excludes the reſt of the Elements: But, in my opinion, Water, and the reſt of the Elements, are but effects of Nature, as other Creatures are, and ſo cannot be prime cauſes. The like the Ferment, which, to my ſenſe and reaſon, is nothing elſe, but a natural effect of natural matter. Concerning his opinion; That *Cauſes and Beginnings* are all one, or that there is but little difference betwixt them, I do readily ſubſcribe unto it; but when he ſpeaks of thoſe *things, which are produced without life*, my reaſon cannot find out, what, or where they ſhould be; for certainly, in Nature they are not, Nature being Life and Soul her ſelf, and all her parts being enlivened and ſoulified, ſo that there can be no generation or natural production without Life. Neither is my ſenſe and reaſon capable to underſtand his meaning, when he ſays, That the *Seeds of things, and the Spirits, as the Diſpenſers thereof, are divided from the Material Cauſe*: For I do ſee no difference betwixt the Seed, and the material Cauſe, but they are all one thing, it being undeniable, that the ſeed is the matter of that which is produced. But your *Author* was pleaſed

to ſay heretofore, that there are but two beginnings or cauſes of natural things; and now he makes ſo many more; for, ſays he, Of *Efficient and Seminal Cauſes, ſome are efficiently effecting, and others effectively effecting*: which nice diſtinctions, in my opinion, do but make a confuſion in natural knowledg, ſetting a mans brain on the rack; for who is able to conceive all thoſe *Chymæras* and Fancies of the *Archeus*, *Ferment*, various *Ideas*, *Blas*, *Gas*, and many more, which are neither ſomething nor no-thing in Nature, but betwixt both, except a man have the ſame Fancies, Viſions and Dreams, your *Author* had? Nature is eaſie to be underſtood, and without any difficulty, ſo as we ſtand in no need to frame ſo many ſtrange names, able to fright any body. Neither do natural bodies know many prime cauſes and beginnings, but there is but one onely chief and prime cauſe from which all effects and varieties proceed, which cauſe is corporeal Nature, or natural ſelf-moving Matter, which forms and produces all natural things; and all the variety and difference of natural Creatures ariſes from her various actions, which are the various motions in Nature; ſome whereof are Regular, ſome Irregular: I mean Irregular, as to particular Creatures, not as to Nature her ſelf; for Nature cannot be diſturbed or diſcompoſed, or elſe all would run into confuſion; Wherefore Irregularities do onely concern particular Creatures, not Infinite Nature; and the Irregularities of ſome parts may cauſe the Irregularities of other Parts, as the Regularities of ſome parts do cauſe the Regularities of others: And thus according as Regularities and Irregularities have power, they cauſe either Peace or War, Sickneſs or Health,

Delight

Delight and Pleaſure, or Grief and Pain, Life or Death, to particular Creatures or parts of Nature; but all theſe various actions are but various Effects, and not prime Cauſes; which is well to be obſerved, leſt we confound Cauſes with Effects. And ſo leaving this diſcourſe for the preſent, I reſt,

MADAM,

Your Faithful Friend

and Servant.

II.

MADAM,

IT is no wonder, your *Author* has ſo many odd and ſtrange opinions in Philoſophy, ſince they do not onely proceed from ſtrange Viſions, Apparitions, and Dreams, but are built upon ſo ſtrange grounds and principles as *Ideas*, *Archeus*, *Gas*, *Blas*, *Ferment*, and the like, the names of which ſound ſo harſh and terrifying, as they might put any body eaſily into a fright, like ſo many Hobgoblins or Immaterial ſpirits; but the beſt is, they can do no great harm, except it be to trouble the brains of them, that love to maintain thoſe opinions; for though they are thought to be powerful beings, yet being not corporeal ſubſtances, I cannot imagine wherein their power ſhould conſiſt; for Nothing can do nothing. But to mention each apart; firſt his *Archeus* he calls *the Spirit of Life*; *a vital Gas or Light*; *the*

In his ch called The Fiction of Elementary Complexions and Mixtures.

In the ch. Of the Birth and Original of Forms. *In the* ch. Of the Ideas of Diſeaſes. *See his* ch. *called* The Seat of Diſeaſes in the Soul is confirmed. Ch. Of Archeal Diſeaſes. Ch. *called* The Subject of inhering of Diſeaſes is in the point of life, *&c.*

the Balſam preſerving from Corruption; the Vulcan *or Smith of Generation; the ſtirrer up, and inward director of Generation; an Air; a skiey or airy Spirit; cloathing himſelf preſently with a bodily cloathing, in things ſoulified, walking through all the dens and retiring places of the ſeed, and transforming the matter according to the perfect act of its own Image, remaining the preſident and overſeer or inward ruler of his bounds even till death; the Principle of Life: the Inn of Life, the onely immediate Witneſs, Executor, and Inſtrument of Life; the Prince and Center of Life; the Ruler of the Stern; the Keeper of Life, and promoter of Tranſmutations; the Porter of the Soul; a Fountainous being; a Flint.* Theſe, and many more names your *Author* attributes to his *Archeus*, but what properly it is, and what its Nature and its peculiar office, I am not able to conceive. In the next place, *Gas* and *Blas* are to your *Author* alſo true Principles of Natural things; for *Gas*[a] *is the Vapour into which Water is diſſolved by Cold, but yet it is a far more fine and ſubtil thing then Vapour*; which he demonſtrates by the Art of Chymiſtry. This *Gas* in another place he calls[b] a *Wild Spirit, or Breath, unknown hitherto, which can neither be conſtrained by Veſſels, nor reduced into a viſible body; in ſome things it is nothing but Water; as for example in Salt, in Fruits, and the like.* But *Blas*[c] *proceeds from the local and alterative motion of the Stars, and is the general beginning of motion, producing heat and cold, and that eſpecially with the changing of the Winds.* There is alſo *Blas*[d] *in all ſublunary things*; witneſs Amulets or preſerving Pomanders, whereby they do conſtrain objects to obey them; *Which Incorporeal Blas of Government acts without a Corporeal Efflux,*

[a] *In the* ch. Of the Gas of the Water.

[b] *In the* ch. Of the Fiction of Elementary Complexions and Mixtures.

[c] *In the* ch. Of the Blas of Meteors.

[d] *In the* ch. Of the unknown action of Government.

Efflux, even as the Moon makes the Sea to ſwell; but the fleſhly generation [e] *hath a Blas of its own, and it is two-fold, one which exiſteth by a natural Motion, the other voluntary, which exiſteth as a mover to it ſelf by an Internal Willing.* There is alſo a *Blas of the Heart*, which is *the fuel of the Vital Spirit, and conſequently of its heat.* The *Ferment* [f] he deſcribes to be *A true Principle or Original beginning of things, to wit, a Formal Created being, which is neither a ſubſtance, nor an accident, but a Neutral being, framed from the beginning of the World in the places of its own Monarchy; in the manner of Light, Fire, the magnal or ſheath of the Air, Forms,* &c. *that it may prepare, ſtir up, and go before the Seeds.* Laſtly, his *Ideas* are *Certain formal ſeminal Lights,* [g] *mutually piercing each other without the adultery of Union; For*, ſays he, *although at firſt, that, which is imagined, is nothing, but a meer being of reaſon, yet it doth not remain ſuch; for truely the Fancy is a ſealifying vertue, and in this reſpect is called Imaginative, becauſe it forms the Images of Likeneſſes, or Ideas of things conceived, and doth characterize them in its own Vital Spirit, and therefore that Idea is made a ſpiritual or ſeminal powerful being, to perform things of great moment.* And thoſe Ideas he makes various and numerous; as *Archeal Ideas, Ideas* of *Diſeaſes, Sealifying Ideas, Piercing Ideas, Forreign and ſtrange Ideas, Mad Ideas, Irrational and Incorrigible Ideas, Staggering Ideas,* and a hundred others: the like of *Gas, Blas*, and the reſt. Thus, *Madam*, I have made a rehearſal of your *Authors* ſtrange, and hitherto unknown, Principles (as his Confeſſion is) of Natural things, which, to my ſenſe and reaſon, are ſo obſcure, intricate and perplex, as is almoſt impoſsible exactly to conceive them;

[e] *In the* ch. Of the Blas of Man.

[f] Of the Cauſes and beginnings of Natural things.

[g] Of the Ideas of Diſeaſes.

when as Principles ought to be eaſie, plain, and without any difficulty to be underſtood; Wherefore what with his Spirits, meer-beings, *non*-beings, and neutral-beings, he troubles Nature, and puzles the brains of his Readers ſo, that, I think, if all men were of his opinion, or did follow the way of his Philoſophy, Nature would deſire God ſhe might be annihilated: Onely, of all other, ſhe doth not fear his Non-beings, for they are the weakeſt of all, and can do her the leaſt hurt, as not being able to obſtruct real and corporeal actions of Nature; for Nature is a corporeal ſubſtance, and without a ſubſtance Motion cannot be, and without Motion oppoſition cannot be made, nor any action in Nature, whether Prints, Seals, Stamps, Productions, Generations, Thoughts, Conceptions, Imaginations, Paſsions, Appetites, or the like: and if motions cannot be without ſubſtance; then all Creatures, their properties, faculties, natures, *&c.* being made by corporeal motions, cannot be *Non*-beings, no nor any thing elſe that is in Nature; for *non*-beings are not in the number of Natural things, Nature containing nothing within her, but what is ſubſtantially, really, and corporeally exiſtent. But your Authors [a] *Ideal Entity*, (whereof he is ſpeaking in another place of his Works,) which performs all the Works of Nature, ſeems to me, as if it were the Jack of all Offices, or like the Jack in a Clock, that makes every Wheel move; for it hath an admirable power to put off and on Corporeality and Incorporeality, and to make it ſelf Something and Nothing as often as it has occaſion; but if this *Proteus* have ſuch power, it may well be named the Magick of Nature. Your *Author* ſaith, it is not the Devil, nor any

[a] Of the Magnetick cure of wounds.

any effect thereof: but certainly, in my opinion, according to its deſcription, and the effects laid to its performance, it muſt be more then the Devil; wherefore, in my Reaſon, I cannot conceive it, neither am I able to underſtand his *Phantaſtick Activity, Fancy of Forms, the Souls acting by an inſenſible way*, and many more ſuch like expreſsions. But I conceive that all theſe can be nothing elſe but the ſeveral motions of the ſenſitive and rational matter, which is the Active, Ingenious, Diſtinguiſhing, Knowing, Wiſe and Underſtanding part of Infinite corporeal Nature; and though Infinite Matter hath Infinite parts in general, yet there is a finiteneſs in every part conſidered by it ſelf: not that I think a Part can really ſubſiſt ſingle and by it ſelf, but it is *onely conſidered ſo in the manner of our Conception*, by reaſon of the difference and variouſneſs of natural Creatures: for theſe being different from each other in their figures, and not all alike, ſo that we can make a diſtinction betwixt them; this difference and diſtinction cauſes us to conceive every part of a different figure by it ſelf: but properly and according to the Truth of Nature, there is no part by it ſelf ſubſiſting; for all parts are to be conſidered, not onely as parts of the whole, but as parts of other parts, all parts being joyned in Infinite Nature, and tied by an inſeparable tie one way or other; although we do not altogether perceive it. But to return to *Ideas*: I had almoſt forgot to tell you, *Madam*, of another kind of *Ideas*, by your *Author* named, *Bewitching* or *Inchanting Ideas*[b], which are for the moſt part found in Women, againſt which I cannot but take exception in the behalf of our Sex: For, ſays he, *Women ſtamp Ideas on themſelves, whereby they,*

[b] Of things Conceived, or Conceptions.

no otherwiſe then Witches driven about with a malignant ſpirit of deſpair, are oftentimes governed or ſnatched away unto thoſe things, which otherwiſe they would not, and do bewail unto us their own and unvoluntary Madneſs: Theſe Ideas are hurtful to themſelves, and do, as it were, Inchant, Infatuate, and weaken themſelves; for ſo (as Plutarch *witneſſes) a deſire of death by hanging took hold of all the young Maids in the Iſland* Chios. By this it appears, that your *Author* has never been in Love, or elſe he would have found, that Men have as well bewitching *Ideas* as Women, and that they are as hurtful to Men, as to Women. Neither can I be perſwaded to believe, that men ſhould not have as well Mad *Ideas* as Women; for to mention no other example, ſome, (I will not ſpeak of your *Author*) their *Writings* and ſtrange Opinions in Philoſophy do ſufficiently witneſs it; but whence thoſe Ideas do proceed, whether from the Bride-bed of the Soul, or the Splene, your *Author* doth not declare. As for the young Maids in *Chios*, I muſt confeſs, it is a very ſtrange example; but I think there have been as many Men that have killed themſelves, as Women, if not more: However, I hope, by the Grace of God, the young Maids in this Kingdom are better adviſed; for if they ſhould do the like, it would be a ſad fate for all young Men. To conclude, *Madam*, all theſe rehearſed opinions of your *Author*, concerning the Grounds or Principles of Natural Philoſophy, if you deſire my Unfeigned Judgment, I can ſay no more, but that they ſhew more Fancy, then Reaſon and Truth, and ſo do many others; and, perhaps, my opinions may be as far from Truth as his, although their Ground is Senſe and Reaſon; for there is

no

no ſingle Creature in Nature, that is able to know the perfecteſt Truth: but ſome opinions, to humane ſenſe and reaſon, may have more probability then others, and every one thinks his to be moſt probable, according to his own fancy and imagination, and ſo I think of mine; nevertheleſs, I leave them to the cenſure of thoſe, that are endued with ſolid judgment and reaſon, and know how to diſcern betwixt things of fancy and reaſon, and amongſt the reſt, I ſubmit them to the cenſure of your *Ladiſhip*, whoſe ſolid and wiſe Judgment is the rule of all the actions of,

MADAM,

Your Faithful Friend

and Servant.

III.

MADAM,

YOur *Author* relating how he diſſents from the *Falſe Doctrine*, as he terms it, *of the Schools*, concerning the Elements, and their Mixtures, Qualities, Temperaments, Diſcords, *&c.* in order to Diſeaſes, is pleaſed to ſay as follows: *I have ſufficiently demonſtrated, that there are not four Elements in Nature, and by conſequence, if there are onely three, that four cannot go together, or encounter; and that the fruits which Antiquity hath believed to be mixt bodies, and thoſe compoſed from a concurrence of four Elements, are materially*

In his Treatiſe called, A paſſive deceiving of the Schools of the Humoriſts.

rially of one onely Element; alſo that thoſe three Elements are naturally cold; nor that native heat is any where in things, except from Light, Life, Motion, and an altering Blas: In like manner, that all actual moiſture is of Water, but all virtual moiſture from the property of the ſeeds: Likewiſe, that dryneſs is by it ſelf in the Air and Earth, but in Fruits by reaſon of the Seeds and Coagulations; and that there are not Contraries in Nature. To give you my opinion hereof, firſt I think it too great a preſumption in any man, to feign himſelf ſo much above the reſt, as to accuſe all others of ignorance, and that none but he alone hath the true knowledg of all things as infallible and undeniable, and that ſo many Learned, Wiſe and Ingenious Men in ſo many ages have been blinded with errors; for certainly, no particular Creature in Nature can have any exact or perfect knowledg of Natural things, and therefore opinions cannot be infallible truths, although they may ſeem probable; for how is it poſsible that a ſingle finite Creature ſhould know the numberleſs varieties and hidden actions of Nature? Wherefore your *Author* cannot ſay, that he hath demonſtrated any thing, which could not be as much contradicted, and perhaps with more reaſon, then he hath brought proofs and demonſtrations: And thus when he ſpeaks of Elements, that there are not four in Nature, and that they cannot go together, or encounter, it may be his opinion; but others have brought as many reaſons to the contrary, and I think with more probability; ſo as it is unneceſſary to make a tedious diſcourſe thereof, and therefore I'le refer you to thoſe that have treated of it more learnedly and ſolidly then I can do. But I perceive your *Author*

is

is much for Art, and ſince he can make ſolid bodies liquid, and liquid bodies ſolid, he believes that all bodies are compoſed out of the Element of Water, and that Water therefore is the firſt Principle of all things; when as Water, in my opinion, is but an Effect, as all other natural Creatures, and therefore cannot be a cauſe or principle of them. Concerning the *Natural coldneſs of Water, Air, and Earth*, it may be, or not be ſo, for any thing your *Author* can truly know; but to my ſenſe and reaſon, it ſeems probable that there are things naturally hot and moiſt, and hot and dry, as well as cold and moiſt, and cold and dry: But all theſe are but ſeveral effects produced by the ſeveral actions of Natural Matter, which Natural Matter is the onely Principle of all Natural Effects and Creatures whatever; and this Principle, I am confident your *Author* can no more prove to be Water, then he can prove that Heat, Light, Life, Motion, and *Blas*, are not material. Concerning what he ſaith, That *Native Heat is no where in things, except from Light, Life, Motion, and an altering Blas*: I believe that motion of life makes not onely heat, but all effects whatſoever; but this native heat is not produced onely from the motions of Particular lives in particular Creatures, but it is made by the motions of Natures life, which life, in all probability, is the ſelf-moving Matter, which no doubt, can and doth make Light and Blas without Heat, and Heat without Light or Blas; Wherefore Light and Blas are not principles of native Heat, no more then native Heat is the principle of Light and Blas. Neither is Water the Principle of Actual moiſture, nor the propriety of ſeeds the Principle of all Virtual moiſture; but ſelf-moving

Matter

Matter is the Principle of all, and makes both actual and virtual moiſture, and there is no queſtion but there are many ſorts of moiſtures. As for *Dryneſs*, which he ſays, *is by it ſelf in the Air and Earth, and in Fruits by reaſon of the Seeds and Coagulations*: I cannot conceive how any thing can be by it ſelf in Nature, by reaſon there is nothing alone and ſingle in Nature, but all are inſeparable parts of one body: perchance, he means, it is naturally and eſſentially inherent in Air and Earth; but neither can that be in my reaſon, becauſe all Creatures and Effects of Nature are Intermixt, and there is as much dryneſs in other Creatures, as in Air and Earth. Laſtly, as for his opinion, That *there are no Contraries in Nature*; I believe not in the eſſence or nature of Matter; but ſenſe and reaſon inform us, that there are Contraries in Natures actions, which are Corporeal motions, which cauſe mixtures, qualities, degrees, diſcords, as alſo harmonious conjunctions and concords, compoſitions, diviſions, and the like effects whatſoever. But though your *Author* ſeems to be an enemy to the mixtures of Elements, yet he makes ſuch a mixture of Divinity, and natural Philoſophy, that all his Philoſophy is nothing but a meer Hotch-potch, ſpoiling one with the other. And ſo I will leave it to thoſe that delight in it, reſting,

MADAM,

Your faithful Friend

and Servant.

MA-

IV.

MADAM,

WAter, according to your *Authors* opinion, *is frozen into Snow, Ice, or Hail, not by Cold, but by its own Gas.* But ſince I am not able to conceive what his Gas is, being a term invented by himſelf, I will briefly declare my own opinion, which is, That Snow, Ice, and Hail, in my judgment, are made in the like manner, as Paſsions or Colours are made and raiſed in Man; for a ſad diſcourſe, or a cruel object will make a Man pale and cold, and a fearful object, will make him tremble; whereas a wanton and obſcene diſcourſe will make ſome red and hot. But yet theſe diſcourſes and objects are onely external, occaſional, and not immediate efficient cauſes of ſuch alterations. Alſo when a Man eats or drinks any thing that is actually hot or cold, or enters into a cold or hot room, bath, or air, he becomes hot or cold by the actions of thoſe external agents that work upon him, or rather whoſe motions the ſenſitive motions of his body do pattern out. The like for diſeaſes; for they may be cauſed either by hearing ill reports, or by taking either hurtful or ſuperfluous food into the Body, or by Infections inwardly or outwardly, and many other ways. Likewiſe may Colours be made different ways; And ſo may Snow, Ice, and Hail; for all looſe, rare, and

Ch. Of the Gas of Water.

porous Bodies are more apt to alter and change then cloſe, ſolid; and denſe bodies; and not onely to change from what they are, but to rechange to what they were. But, *Madam*, many ſtudious perſons ſtudy Nature more in her own ſubſtance, then in her various actions, which is the cauſe they arrive to no knowledg of Natures Works; for the ſame parts of Matter may act or work ſeveral ways: Like as a Man, or other animal creature, may put one part of his body into various and ſeveral poſtures, and move it many different ways. Your *Author* may ſay, that although ſeveral Creatures may be changed to our ſight or perception, yet they are not really changed in Nature. I anſwer, Their Principle, which is a natural matter, of which all Creatures are made, cannot be changed, becauſe *it is one, ſimple, and* unalterable in its Nature; but the figures of ſeveral Creatures are changed continually by the various motions of this matter; not from being matter, but onely from ſuch or ſuch a figure into another; and thoſe figures which do change, in their room are others produced to keep up the certain kinds of Creatures by a continual ſucceſsive alteration. And as there are changes of parts, ſo there are alſo mixtures of ſeveral parts, figures and motions in one and the ſame Matter; for there are not different kinds in the nature of Matter: But, although Matter is of ſeveral degrees, as partly animate and partly inanimate, and the animate Matter is partly rational, and partly ſenſitive; Nevertheleſs in all thoſe degrees it remains the ſame onely or meer Matter; that is, it is nothing elſe but Matter, and the onely ground in which all changes are made. And therefore I cannot perceive it to be impoſsible in Nature, as to

your

your *Author* it ſeems, That *Water ſhould not be tranſchangeable into Air*; for, that he ſays, *The Air would have increaſed into a huge bulk, and all Water would have long ſince failed*: It is no conſequence, becauſe there is a Mutual tranſmutation of all figures and parts of Nature, as I declared above; and when one part is tranſchanged into another, that part is ſupplied again by the change of another; ſo that there can be no total mutation of kinds or ſorts of figures, but onely a mutual change of the particulars. Neither is it of any conſequence, when your *Author* ſays, That *if Water ſhould once be turned into Air, it would always remain Air, becauſe a returning agent is wanting, which may turn Air again into Water.* For he might as well ſay, a Man cannot go or turn backward, being once gone forward. And although he brings a General Rule, That *every thing, as much as in it lies, doth deſire to remain in it ſelf*; Yet it is impoſsible to be done, by reaſon there is no reſt in Nature, ſhe being in a perpetual motion, either working to the conſiſtance of a figure, or to the uniting of ſeveral parts, or to the diſſolving or dividing of ſeveral parts, or any other ways. By diſſolving, I do not mean annihilating, but ſuch a diſſolving of parts as is proper for the altering of ſuch a figure into one or many other figures. But rather then your Author will conſent to the tranſchanging of Water into Air, he will feign ſeveral grounds, ſoils or pavements in the Air, which he calls *Peroledes*, and ſo many Flood-gates and Folding-dores, and make the Planets their Key-keepers; which

which are pretty Fancies, but not able to prove any thing in Natural Philoſophy. And ſo leaving them to their Author, I reſt,

MADAM,

Your humble and

faithful Servant.

V.

MADAM,

Ch. The Fiction of Elementary Complexions and Mixtures.

I Cannot in reaſon give my conſent to your *Authors* opinion, That *Fiſhes do by the force or vertue of an inbred Seed tranſchange ſimple water into fat, bones, and their own fleſh, and that materially they are nothing but water tranſchanged, and that they return into water by art.* For though my opinion is, that bodies change and alter from one figure into another, yet they do not all change into water, neither is water changed into all other figures; and certainly Fiſhes do not live nor ſubſiſt meerly by Water, but by ſeveral other meats, as other animals do; either by feeding upon other Fiſhes, the ſtronger devouring the weaker, or upon Mud, and Graſs, and Weeds, in the bottom of Seas, Rivers and Ponds, and the like: As for example, put Fiſh into a Pool or Sluce, wherein there is not any thing but clear, pure water, and in a ſhort time they will be ſtarved to death for want of Food; and as they cannot live onely by water, ſo neither

can

can they breed by the power of water, but by the power of their food, as a more ſolid ſubſtance: And if all Creatures be nouriſhed by thoſe things whereof they conſiſt, then Fiſhes do not conſiſt of water, being not nouriſhed by water; for it is not the tranſchanging of water, by which Fiſhes live, and by which they produce; but it is the tranſchange of food, proceeding from other Creatures, as I mentioned above. 'Tis true, Water is a proper element for them to live in, but not to live on; and though I have neither learning, nor experience in *Chymiſtry*, yet I believe, that your *Author*, with all the ſubtileſt Art he had, could not turn or convert all Creatures into pure and ſimple water, but there would have been dregs and ſeveral mixtures left: I will not ſay, that the Furnace may not rarifie bodies extreamly, but not convert them into ſuch a ſubſtance or form as Nature can. And although he thinks Gold is made of Water, yet I do not believe he could convert it into Water by the help of Fire; he might make it ſoluble, fluid and rare, but all things that are ſupple, ſoluble, flowing and liquid, are not Water; I am confident no *Gas* or *Blas* will, or can transform it, nor no Art whatſoever; what Nature may do, I know not. But ſince your *Authors* opinion is, that Air is alſo a Primigenial Element, and in its nature a ſubſtance, Why doth he not make it a Principle of natural bodies, as well as Water? I think it had not been ſo improper to liken Juices to Water; but to make the onely Principle of the compoſition and diſſolution of all Creatures to be Water, ſeems to me very improbable. Neither can I admit in reaſon that the Elements ſhould be called, firſt, pure, and ſimple beings; we might as well call all other crea-

tures, firſt, pure, and ſimple beings: for although the word Element ſounds as much as Principle, yet they are in my reaſon no more Principles of Nature, then other Creatures are, there being but one Principle in Nature, out of which all things are compoſed, *viz.* the onely matter, which is a pure and ſimple corporeal ſubſtance; and what Man names impure dregs and filths, theſe are onely irregular and croſs motions of that matter, in reſpect to the nature of ſuch or ſuch a figure; or ſuch motions as are not agreeable and ſympathetical to our Paſsions, Humors, Appetites, and the like. Concerning the Contrarieties, Differences and Wars in Nature, which your *Author* denies, I have ſpoken thereof already, and though he endeavours in a long diſcourſe to prove, that there *is no War in nature; yet, in my* opinion, *it is to little* purporſe, and *it* makes but a war in the thoughts of the Reader; I know not what it did in his own. But I obſerve he appeals often to Divinity to bear him up in Natural Philoſophy; but how the Church doth approve his Interpretations of the Scripture, I know not: Wherefore I will not meddle with them, leſt I offend the Truth of the Divine Scripture, wherein I deſire to ſubmit to the Judgment of the Church, which is much wiſer *then I*, or any ſingle Perſon can be. However, for all what your *Author* ſays, I do nevertheleſs verily believe, there is a war between Natural motions: For example; between the Regular motions of Health, and the Irregular motions of Sickneſs; and that things applied do oftentimes give aſsiſtance to one ſide or other, but many times in the conflict, the applied remedies are deſtroyed, and ſometimes they are forced to be Neutrals: Wherefore

though

though the nature of Infinite Matter is ſimple, and knows of no diſcord, yet her actions may be croſs and oppoſite: the truth is, Nature could never make ſuch variety, did her actions never oppoſe each other, but live in a conſtant Peace and Unity. And thus leaving them to agree, I am confident your *Ladiſhip* and I ſhall never diſagree; for as long as my life doth laſt, I ſhall always prove,

MADAM,

Your conſtant Friend,

and faithful Servant.

VI.

MADAM,

YOur *Author* condemns the *Schools* for ſaying, That *Air is moiſt*, or that it may be *converted into Water by preſſing it together*; bringing an example of an *Iron Pipe, wherein Air has been preſſed together, which afterwards in its driving out has, like a Hand-gun diſcharged with Gun-powder, ſent a bullet thorow a board or plank*. Truly, *Madam*, concerning the moiſture of Air, I am againſt it, but the tranſchanging of Air into Water I do verily believe, *viz.* that ſome ſorts of Air may be contracted or condenſed into Water, and that Water again may be dilated into Air, but not really, commonly and eaſily by Art, but onely by Nature. Wherefore your *Authors* Experiment can In the *ch.* of *Air.*

ſerve

ſerve for no proof; for an artificial trial cannot be an infallible natural demonſtration, the actions of Art, and the actions of Nature being for the moſt part very different, eſpecially in productions and tranſmutations of natural things: Neither can an alteration of parts, cauſe an utter deſtruction of the whole, becauſe when ſome parts change from their figures, other parts of matter change again into the like figures, by which ſucceſsive change the continuation of the whole is kept up. Next your *Author* reproves the Schools for maintaining the opinion, that *Air is hot*; for ſays he, *Water, Air, and Earth, are cold by Creation, becauſe without Light, Heat, and the partaking of Life.* He might, in my opinion, conclude, as well, that Man is cold by Creation, becauſe a Chameleon, or a Fiſh *is cold, being all of animal kind:* But why may not ſome ſorts of Air, Water and Earth be hot, and ſome be cold, as well as ſome ſorts of Light are hot, and ſome cold; and ſo ſeveral other Creatures? His Reaſons prove nothing: for Light doth not make Heat, nor is it the principle of Heat; and it is no conſequence to ſay, all that is without *Light is* without Heat, there being many things without Light, which nevertheleſs are Hot; But to ſay, Water, Air, and Earth are cold, becauſe they are *without* heat, is no proof, but a meer begging of the principle; *for it* is but the ſame thing, as if I ſhould ſay, this is no Stone, becauſe it is no Glaſs. And that Water, Air and Earth, do not partake of Life, muſt be proved firſt, for that is not granted as yet, there being, according to my opinion, not one Creature that wants Life in all Nature. Again: your *Author* is of opinion, That *Water is the firſt and chief Principle of all Natural things.* But this

this I can no more believe, then that *Water ſhould never change or degenerate from its eſſence*: nay, if your *Author* means, there ſhall always be Water in Nature, it is another thing; but if he thinks that not any part of water doth or can change or degenerate in its nature, and is the principle and chief producer of all other Creatures; then he makes Water rather a Creator then a Creature; and it ſeems, that thoſe Gentiles which did worſhip Water, were of the ſame opinion, whereas yet he condemns all Pagan opinions, and all thoſe that follow them. Moreover, I cannot ſubſcribe to his opinion, That *Gas and Blas from the Stars do make heat*: For heat is made ſeveral ways, according to its ſeveral ſorts; for there is a dry heat, and a moiſt heat, a burning, melting, and evaporating heat, and many more. But as for *Meteors*, that *they are made by Gas and Blas*, I can ſay nothing; by reaſon I am not skilled in Aſtrology, and the ſcience of the Heavens, Stars, and Planets; wherefore if I did offer to meddle with them, I ſhould rather expreſs my Ignorance, then give your *Ladiſhip* any ſolid reaſons; and ſo I am willing to leave this ſpeculation to others, reſting content with that knowledg Nature hath given me without the help of Learning: Which I wholly dedicate and offer to your *Ladiſhip*, as becomes,

MADAM,

Your faithful Friend

and Servant.

VII.

MADAM,

HAving made mention in my laſt of your *Authors* opinion, *That Air is in its nature Cold,* I thought it fit to take a ſtricter view of the temper of Air, and to ſend you withal my own opinion thereof. Firſt of all, I would fain know, what ſort of Air your *Author* means; for if he *thinks* there is but one ſort of Air, he might as well ſay, that there is but one ſort of Animals, or Vegetables; whereas yet there are not onely different ſorts of animal and vegetable kind, but alſo different particulars in one and the ſame ſort: As for example, what difference is not amongſt Horſes, as between a Barb, a Turk, a Ginnet, a Courſer of *Naples*, a Flanders-horſe, a Galloway, an Engliſh-horſe, and ſo forth? not onely in their ſhapes, but alſo in their natures, tempers, and diſpoſitions? The like for Cows, Oxen, Sheep, Goats, Dogs, as alſo for Fowl and Fiſh, nay, for Men. And as for Vegetables, What difference is there not between Barly and Wheat, and between *French*-barly, *Pine*-barly, and ordinary Barly; as alſo our *Engliſh*-wheat, *Spaniſh*-wheat, *Turkiſh*-wheat, *Indian*-wheat, and the like? What difference is there not amongſt Grapes, as the *Malago*, *Muſcadel*, and other Grapes, and ſo of all the reſt of Vegetables? The ſame may be ſaid of the Elements; for there is as much difference amongſt the Elements as amongſt other Creatures. And ſo of Air: for Air

in ſome places, as in the *Indies*, eſpecially about *Braſilia*, is very much different from our air, or from the air that is in other places: Indeed, in every different Climate, you ſhall find a difference of air, wherefore 'tis impoſsible to aſsign a certain temper of heat or cold to air in general. But although my ſenſe and reaſon inform me, that air in its own nature or eſſence is neither hot nor cold, yet it may become hot or cold, by hot or cold motions; for the ſenſitive perceptive motions of Air may pattern out heat or cold; and hence it is, that in Summer, when as heat predominates, the air is hot; and in Winter, when as cold predominates, the air is cold. But, perhaps, you will ſay, air may be cooled by moving it with a Fan, or ſuch like thing which can make wind; wherefore it follows, that air muſt needs be naturally cold. I anſwer, That doth not prove Air to be in its nature cold: for this moving or making of wind may contract or condenſe the air into cold motions, which may cauſe a cold wind, like as Ventiducts, where the air running thorow narrow Pipes makes a cold wind. The ſame may be done with a mans breath; for if he contract his lips cloſe, his breath will be cold, but if he opens his mouth wide, his breath will be warm. Again: you may ſay, that rain is congealed by the coldneſs of the air into Snow, Hail and Ice. I anſwer; Froſt, Ice, Snow and Hail, do not proceed from the coldneſs of the air, but rather the coldneſs of the air proceeds from them; for Ice, Snow, and Hail, proceed from cold contraction and condenſation of a vaporous or watery ſubſtance; and as Froſt and Snow cauſe air to be cold, ſo Thunder and Lightning cauſe it to be hot, ſo long as they laſt. Thus, *Madam*, though

Air

Air may be altered either to heat or cold, yet it is neither hot nor cold in it ſelf. And this is all for the preſent that I can ſay concerning the Temper of Air; I conclude, and reſt,

MADAM,

Your conſtant Friend,

and faithful Servant.

VIII.

MADAM,

HAving hitherto conſidered your *Authors* Elements or Principles of Natural things, you will give me leave to preſent you now with a ſhort view of his Opinions concerning Wind, Vacuum, Rainbows, Thunder, Lightning, Earth-quakes, and the like; which I will do as briefly as I can, leſt I betray my Ignorance; for I confeſs my ſelf not to be well verſed in the knowledg of Meteors, nor in thoſe things which properly belong to the Mathematicks, as in Aſtrology, Geography, Opticks, and the like. But your *Author* ſays, in the firſt place, That *Natural Wind is nothing but a flowing Air, moved by the Blas of the Stars.* Certainly, *Madam*, if this were ſo, then, in my judgment, when the Stars blaze, we ſhould have conſtant Winds, and the more they blaze, the more violent winds there would be: But I have rather obſerved the contrary, that when the Stars blaze moſt apparently,

Ch. Of the Blas of Meteors.

we have the calmeſt weather either in Summer or Winter. Perchance your *Author* will ſay, he doth not mean this apparant and viſible Blas, but another inviſible Blas. I anſwer; I know not, nor cannot conceive any other Blas in the Stars, except I had ſeen it in a Viſion; neither do I think that Nature her ſelf knows of any other, But your *Author* doth refer himſelf upon the Authority of *Hypocrates*, who ſays, That *not onely the Wind is a blaſt, but that all Diſeaſes are from blaſts; and that there is in us a Spirit ſtirring up all things by its Blas; which Spirit, by a Microcoſmical Analogy, or the proportion of a little World, he compares to the blaſts of the world.* As for my particular, *Madam*, I dare ſay, I could never perceive, by my ſenſe and reaſon, any ſuch blazing Spirit in me; but I have found by experience, that when my mind and thoughts have been benighted with Melancholy, my Imagination hath been more active and ſubtil, then when my mind has been clear from dark Melancholy; Alſo I find that my thoughts and conceptions are as active, if not more, in the night then in the day; and though we may ſometimes dream of ſeveral Lights, yet I cannot perceive a conſtant light in us; however Light, Blazes, and all thoſe effects are no more then other effects of Nature are; nor can they have more power on other Creatures, then other Creatures have on them: Neither are they made otherwiſe then by the corporeal motions of Natural Matter, and are diſſolved and tranſchanged as other Creatures, out of one form or figure into another. Next your *Author* diſcourſing [a] whether there be any Vacuum in Nature, doth incline to the affirming party, that there is a Vacuum in the Air; to wit, *There*

[a] *Ch.* Of Vacuum.

is in the air ſomething, that is leſs then a body, which fills up the emptineſſes or little holes and pores in the air, and which is wholly annihilated by fire; It is actually void of all matter, and is a middle thing between a body and an Incorporeal Spirit, and almoſt nothing in reſpect of bodies; for it came from Nothing, and ſo may eaſily be reduced to nothing. All this, *Madam*, ſurpaſſes my capacity; for I can in no ways conceive any thing between ſomething and nothing, as to be leſs then ſomething, and more then nothing; for all that is corporeal in Nature, is to my reaſon ſomething; that is, ſome really exiſtent thing; but what is incorporeal in Nature, is nothing; and if there be any abſolute vacuum in Nature, as your *Author* endeavours to prove, then certainly this Vacuum cannot be any thing whatſoever; for a Vacuum is a pure Nothing. But many ingenious and learned men have brought as many arguments and reaſons againſt Vacuum, as others bring for it, and ſo it is a thing which I leave to them to exerciſe their brains withal. The like is the opinion which many maintain concerning Place, *viz.* that there is a conſtant ſucceſsion of Place and Parts, ſo that when one part removes, another doth ſucceed in its place; the truth and manner whereof I was never able to comprehend: for, in my opinion, there can be no place without body, nor no body without place, body and place being all but one thing. But as for the perpetual Creation and annihilation of your *Authors* Vacuities, give me leave to tell you, *Madam*, that it would be a more laborious work, then to make a new World, or then it was to make this preſent World; for God made this World in ſix days, and reſted the ſeventh day; but this

this is a perpetual making of ſomething out of nothing. Again: concerning Rainbows, your *Author* ſays, [a] *That a Rainbow is not a natural effect of a natural Cauſe, but a divine Myſtery in its original; and that it has no matter, but yet is in a place, and has its colours immediately in a place, but in the air mediately, and that it is of the nature of Light.* This is indeed a great myſtery to my reaſon; for I cannot conceive, as I ſaid before, a place without a body, nor how Light and Colours can be bodileſs: But as for Rainbows, I have obſerved, when as water hath been blown up into the air into bubles, that by the reflexion of light on the watery bubles, they have had the like colours of the Rainbow; and I have heard, that there hath been often ſeen at the riſing and ſetting of the Sun, Clouds of divers colours; Wherefore I cannot be perſwaded to believe that a Rainbow ſhould not have a natural cauſe, and conſequently be a natural effect; For that God has made it a ſign of the Covenant between him and mortal men, is no proof, that it is not a natural effect; Neither can I believe that it has not been before the Flood, and before it was made a ſign by God, as your *Author* imagines; for though it was no ſign before the Flood, yet it may nevertheleſs have had its being and exiſtence before the Flood. Moreover, as for Thunder and Lightning, your *Authors* opinion is; *That although they may have concurring natural Cauſes, yet the mover of them is an Incorporeal Spirit, which is the Devil; who having obtained the Principality of this world, that he may be a certain executer of the Judgments of the chief Monarch, and ſo the Umpire and Commiſſioner of Lightning and Thunder, ſtirs up a monſtrous and ſudden Blaſt in the Air, yet under Covenanted*

[a] *Ch.* Of an Irregular Meteor.

nanted Conditions; for unleſs his power were bridled by divine Goodneſs, he would ſhake the Earth with one ſtroke ſo, as to deſtroy all mortal men: and thus the cracking noiſe or voice of Thunder is nothing but a ſpiritual Blas of the Evil Spirit. I will not deny, *Madam*, that Thunder and Lightning do argue the Power of the moſt Glorious God, for ſo do all the reſt of the Creatures; but that this is the onely and immediate cauſe, which your *Author* aſsigns of Thunder and Lightning, I cannot believe; for ſurely, in my opinion, Thunder and Lightning are as much natural effects as other Creatures in Nature; and are not the Devils Blas, for I think they may be made without the help of the Devil; nay, I believe, he may be as much affraid of Thunder, as thoſe Creatures that live on Earth. But what the cauſes are, and how Thunder and Lightning are made, I have elſewhere declared more at large, eſpecially in my *Philoſophical Opinions*. Again your *Author* ſpeaking [a] of the *Trembling of the Earth, thinks it is nothing elſe but the Judgment of God for the ſins of Impenitent men.* For my part, *Madam*, I can ſay little to it, either concerning the divine, or the natural cauſe of Earthquakes: As for the divine and ſupernatural Cauſe, which your *Author* gives, if it was ſo, then I wonder much, why God ſhould command Earth-quakes in ſome parts of the World more frequent then in others. As for example; we here in theſe parts have very ſeldom Earth-quakes, and thoſe we have, which is hardly one in many ages, are not ſo furious, as to do much harm; and ſo in many other places of the World, are as few and as gentle Earth-quakes as here; when as in others, Earth-quakes are very frequent and dreadful: From whence

[a] *Ch.* Of the Earthquake.

whence it muſt needs follow, if Earth-quakes be onely a Judgment from God for the ſins of Impenitent Men, and not a natural effect, that then thoſe places, where the Earth is not ſo apt to tremble, are the habitations of the bleſſed, and that they, which inhabit thoſe parts that are apt to tremble, are the accurſed; when as yet, in thoſe places where Earthquakes are not uſual and frequent, or none at all, People are as wicked and impious, if not more, then in thoſe where Earthquakes are common. But the queſtion is, Whether thoſe parts which ſuffer frequent and terrible Earthquakes, would not be ſo ſhaken or have ſuch trembling fits, were they uninhabited by Man, or any other animal Creature? Certainly, in my opinion, they would. But as for the Natural *Cauſe of Earthquakes*, you muſt pardon me, *Madam*, that I cannot knowingly diſcourſe thereof, by reaſon I am not ſo well skilled in Geography, as to know the ſeveral Soils, Climats, Parts, Regions, or Countries, nor what diſpoſed matter may be within thoſe parts that are ſubject to frequent Earthquakes: Onely this I may ſay, that I have obſerved, that the light of a ſmall Fire or Candle, will dilate it ſelf round about; or rather that the air round about the Fire or Candle, will pattern out both its light and its heat. Alſo I have obſerved, That a Man in a raging fit of Madneſs will have ſuch an unſual ſtrength, as ten ſtrong men ſhall hardly be able to encounter or bind him, when as, this violent fit being paſt, a ſingle man, nay a youth, may over-maſter him: Whence I conclude, that the actions, as the motions of Nature, are very powerful when they uſe their force, and that the ordinary actions of Nature are not ſo forcible as neceſſary; but the extraordinary are more

[a] *Ch.* of the Birth or Original of Forms

forcible then neceſſary. Laſtly, your *Author* [a] takes great pains to prove, That *the Sun with his light rules the Day, and the Moon with hers the Night; and that the Moon has her own Native light; and that Bats, Mice, Dormice, Owles, and many others, as alſo Men, which riſe at night, and walk in their ſleep, ſee by the light and power of the Moon; alſo that Plants are more plentifully nouriſhed by the night.* But leſt it might be concluded, that all this is ſaid without any probability of Truth, by reaſon the Moon doth not every night ſhine upon the Earth, he makes a difference between the Manner of the Sun's and Moon's enlightning the Earth; to wit, that the Sun ſtrikes his beams in a right line towards the Earth, but the Moon doth not reſpect the Centre of the World, which is the Earth, in a right line; but her Centre is always excentrical, and ſhe reſpects the Earth onely by accident, when ſhe is concentrical with the World; And therefore he thinks there is another light under the Earth even at Midnight, whereby many Eyes do ſee, which owes alſo its riſe to the Moon. This opinion of your *Author* I leave to be examined by thoſe that have skill in Aſtronomy, and know both the Light and the Courſe of the Moon: I will onely ſay thus much, that when the Moon is concentrical, as he calls it, with the World, as when it is Full and New Moon, ſhe doth not ſhine onely at night, but alſo in the day, and therefore ſhe may rule the day as well as the night, and then there will be two lights for the ruling of the day, or at leaſt there will be a ſtrife betwixt the Sun and the Moon, which ſhall rule. But as for Men walking aſleep by the light of the Moon, my opinion is, That blind

men

men may walk as well by the light of the Sun, as ſleeping men by the light of the Moon. Neither is it probable, that *the Moon or her Blas doth nouriſh Plants*; for in a cold Moon-ſhiny night they will often die; but it is rather the Regular motions in well tempered matter that cauſe fruitful productions and maturity. And ſo I repoſe my Pen, leſt it treſpaſs too much upon your Patience, reſting,

MADAM,

Your humble and

faithful Servant.

IX.

MADAM,

IN my former, when I related your *Authors* opinion, concerning Earthquakes, I forgot to tell you, that he counts the the Doctrine of the Schools abſurd, when they ſay that Air, or any Exhalation, is the cauſe of them: For, ſays he, *There is no place in the Pavements or ſoils of the Earth, wherein any airy body may be entertained, whether that body be a wind, or an airy exhalation.* But ſince I promiſed I would not offer to appoint or aſsign any natural cauſes of Earthquakes, I have only taken occaſion hence to enquire, whether it may not be probably affirmed, that there is air in the bowels of the Earth: And to my reaſon it ſeems very probable; I mean not this Exterior air, flowing about the circumference,

ference of the Earth we inhabite; but ſuch an airy matter as is pure, refined, and ſubtil, there being great difference in the Elements, as well as in all other ſorts of Creatures; for what difference is there not between the natural heat of an animal, and the natural heat of the Sun? and what difference is there not between the natural moiſture of an Animal, and the natural moiſture of Water? And ſo for the Purity of Air, Dryneſs of Earth, and the like: Nay, there is great difference alſo in the production of thoſe Effects: As for example; the heat of the Earth is not produced from the Sun, nor the natural heat in Animals, nor the natural heat in Vegetables; for if it were ſo, then all Creatures in one Region or place of the Earth would be of one temper. As for example: Poppy, Night-ſhade, Lettuce, Thyme, Sage, Parſly, *&c.* would be all of one temper and degree, growing all in one Garden, and upon one patch of Ground, whereon the Sun equally caſts his beams, when as yet they are all different in their natural tempers and degrees. And ſo certainly there is Air, Fire, and Water, in the bowels of the Earth, which were never made by the Sun, the Sea, and this Exterior elemental Air. Wherefore thoſe, in my opinion, are in groſs Errors, who imagine that theſe Interior Effects in the Earth are produced from the mentioned Exterior Elements, or from ſome other foreign and external Cauſes; for an external cauſe can onely produce an external effect, or be an occaſion to the production of ſuch or ſuch an effect, but not be the immediate efficient or eſſential cauſe of an interior natural effect in another Creature, unleſs the Interior

natures

natures of different Creatures have ſuch an active power and influence upon each other, as to work interiouſly at a diſtance, ſuch effects as are proper and eſſential to their Natures, which is improbable; for though their natures and diſpoſitions may mutually agree and ſympathize, yet their powers cannot work upon their Interior Natures ſo, as to produce internal natural effects and proprieties in them. The truth is, it cannot be; for as the Cauſe is, ſo is the Effect; and if the Cauſe be an exterior Cauſe, the Effect muſt prove ſo too: As for example; the heat of the Sun, and the heat of the Earth, although they may both agree; yet one is not the cauſe of the other; for the Suns heat cannot pierce into the bowels of the Earth, neither can the heat of the Earth aſcend ſo far as to the Center of the Sun: As for the heat of the Earth, it is certain enough, and needs no proof; but as for the heat of the Sun, our ſenſes will ſufficiently inform us, that although his beams are ſhot forth in direct lines upon the face of the Earth, yet they have not ſo much force, as to pierce into a low Celler or Vault; Wherefore it is not probable, that the Earth hath its natural heat from the Sun, and ſo neither its dryneſs from the Air, nor its moiſture from the Sea, but theſe interior effects in the Earth proceed from ſome other interior cauſes. And thus there may be great difference between the heat, cold, moiſture, and drought which is in the Elements, and between thoſe which are in Vegetables, Minerals, and Animals, not onely in their General kinds, but alſo in their Particulars: And not onely a difference in the aforeſaid qualities of heat, cold, moiſture, and drought, but alſo in all other motions, as Dilations, Contractions, Rare-

factions, Denſations, *&c.* nay, in their Mixtures and Temperaments: As for example; the temper of a Mineral is not the temper of an Animal, or of a Vegetable, neither is the temper of theſe the temper of the exterior Elements, no more then the temper of the Elements is the temper of them; for every Creature has a temper natural and peculiar to it ſelf, nay, every particular Creature, has not onely different tempers, compoſitions, or mixtures, but alſo different productions; or elſe, if there were no difference in their productions, every Creature would be alike, when as yet there are ſeldom two that do exactly reſemble each other. But I deſire you to underſtand me well, *Madam*, when I ſpeak of Particular heats, colds, droughts, and *moiſtures*; for I do not believe that all Creatures are made out of the four Elements, no more, then that the Elements are produced from other Creatures, for the Matter of all Creatures is but one and the ſame; but although the Matter is the ſame, nevertheleſs, the Tempers, Compoſitions, Productions, Motions, *&c.* of particular Creatures, may be different, which is the cauſe of their different exterior figures, or ſhapes, as alſo of their different Interiour Natures, Qualities, Properties, and the like. And ſo, to conclude, there is no impoſsibility or abſurdity in affirming, that there may be Air, Fire, and Water, in the bowels of the Earth proper for thoſe Creatures, which are in her, although not ſuch an Elemental Air, Fire and Water, as is ſubject here to our ſenſes; but another kind of Air, Fire and Water, different from thoſe. But this being a ſubject for

Learned

Learned and Ingenious men to work and contemplate upon, better, perhaps, then I can do, I will leave it to them, and ſo remain,

MADAM,

Your conſtant Friend,

and faithful Servant.

X.

MADAM,

YOur *Author* mentioning in his Works, ſeveral Seeds of ſeveral Creatures, makes me expreſs my opinion thus in ſhort concerning this Subject: Several Seeds ſeem to me no otherwiſe then ſeveral Humours, or ſeveral Elements, or ſeveral other Creatures made of one and the ſame Matter, that produce one thing out of another, and the barrenneſs of ſeeds proceeds either from the irregularity of their natural motions, or from their unaptneſs or unactivity of producing. But it is to be obſerved, *Madam*, that not every thing doth produce always its like, but one and the ſame thing, or one and the ſame Creature, hath many various and different productions; for ſometimes Vegetables do produce Animals, Animals produce Minerals, Minerals produce Elements, and Elements again Minerals, and ſo forth: for proof I will bring but a mean and common example. Do not Animals produce Stones, ſome in one, and ſome in another part of their

their bodies, as ſome in the Heart, ſome in the Stomack, ſome in the Head, ſome in the Gall, ſome in the Kidnies, and ſome in the Bladder? I do not ſay, that this Generation of Stone is made the ſame way as the natural generation of Animals, as, for example, Man is born of his Parents; but I ſpeak of the generation or production of Creatures in general, for otherwiſe all Creatures would be alike, if all generations were after one and the ſame manner and way. Likewiſe do not Fruits, Roots, Flowers and Herbs, produce Worms? And do not Stones produce Fire? witneſs the Flint. And doth not Earth produce Metal? 'Tis true, ſome talk of the ſeed of Metals, but who with all his diligent obſervations could find it out as yet? Wherefore it is, in my opinion, not probable, that *Minerals* are produced by way of ſeeds. Neither can I perceive that any of the Elements is produced by ſeed, unleſs Fire, which ſeems, to my ſenſe and reaſon, to encreaſe numerouſly by its ſeed, but not any other of the Elements. And thus productions are almoſt as various as Creatures, or rather parts of Creatures, are; for we ſee how many productions there are in one animal body, as the production of fleſh, bones, marrow, brains, griſtles, veines, ſinews, blood, and the like, and all this comes from Food, and Food from ſome other Creatures, but all have their original from the onely matter, and the various motions of Nature. And thus, in my opinion, all things are made eaſily, and not by ſuch conſtrained ways as your *Author* deſcribes, by Gas, Blas, Ideas, and the like; for I am confident, Nature has more various ways of producing natural things then any Creature is able to conceive. I'le give another

example

example of Vegetables, I pray you but to conſider, *Madam*, how many ſeveral ways Vegetables are produced, as ſome by ſeeds, ſome by ſlips, ſome by grafts, *&c.* The graft infuſes and commixes with the whole ſtock and the branches, and theſe do the like with the graft: As for example; an Apple grafted in Colewort produces Apples; but thoſe Apples will have a taſte and ſent of the Colewort, which ſhews that ſeveral parts of ſeveral Creatures mix, joyn, and act together; and as for ſeeds, they are tranſchanged wholly, and every part thereof into the produced fruit, and every part of the ſeed makes a ſeveral production by the help of the co-working parts of the Earth, which is the reaſon that ſo many ſeeds are produced from one ſingle ſeed; But Producers, that waſte not themſelves in productions, do not produce ſo numerouſly as thoſe that do diſſolve; yet all Creatures increaſe more or leſs, according to their ſupplies or aſsiſtances; for ſeeds will encreaſe and multiply more in manured and fertile then in barren grounds; nay, if the ground be very barren, no production at all will be; which ſhews, that productions come not barely from the ſeed, but require of neceſsity ſome aſsiſtance, and therefore neither Archeus, nor ſeminal Ideas, nor Gas, nor Blas, would do any good in Vegetables, if the ground did not aſsiſt them in their generations or productions, no more then a houſe would be built without the aſsiſtance of labourers or workmen; for let the materials lie never ſo long, ſurely they will never joyn together of themſelves to the artificial ſtructure of an houſe. Wherefore ſince there is ſo much variety in the production of one kind of Creatures, nay of every particular in every kind, what needs

Man to trouble his brain for the manner and way to deſcribe circumſtantially every particular production of every Creature by ſeminal or printing Ideas, or any other far-fetched termes, ſince it is impoſsible to be done? And as for thoſe Creatures whoſe producers are of two different ſorts, as a Mule bred of an Aſſe and a Horſe, and another Creature bred of a Cony and a Dormouſe; all which your *Author* thinks [a] do take more after their mother then their father, more after the breeder then the begetter; I will not eagerly affirm the contrary, although it ſeems to me more probable: But this I can ſay, that I have obſerved by experience, that Faunes and Foales have taken more after the Male then after the Female; for amongſt many ſeveral colour'd Deer, I have ſeen but *one milk* white Doe; and ſhe never brought forth a white Faun, when as I have ſeen a white Buck beget white and ſpeckled Faunes of black and ſeveral coloured Does. Alſo in Foals I have obſerved, that they have taken more after the Male then after the Female, both in ſhape and colour. And thus I expreſs no more, but what I have obſerved my ſelf, others may find out more examples; theſe are ſufficient for me; ſo I leave them, and reſt,

[a] In the *Ch.* the Poſition is demonſtrated: and in the *ch.* called the Authority of the *Duumvirate.*

MADAM,

Your faithful Friend

and Servant.

MA-

XI.

MADAM,

YOu will ceaſe to wonder, that I am not altogether capable to underſtand your *Authors* opinions in Natural Philoſophy, when you do but conſider, that his expreſsions are for the moſt part ſo obſcure, myſtical and intricate, as may puzzle any brain that has not the like Genius, or the ſame Conceptions with your *Author*; wherefore I am forced oftentimes to expreſs my ignorance rather, then to declare to you the true ſenſe of his opinions. In the number of theſe is his diſcourſe of a *Middle Life*[a], viz. That *the qualities of a middle life do remain in things that are tranſchanged*: For I cannot underſtand what he means by a middle life; whether it be a life that is between the ſtrongeſt and weakeſt, or whether he means a life between the time of production and diſſolution, or between the time of conception and production; or whether he means a life that is between two ſorts of ſubſtances, as more then an Animal, and not ſo high and excellent as an Angel; or whether he means a middle life for places, as neither in Heaven nor in Hell, but in Purgatory, or neither in, nor out of the world, or any other kind of life: Wherefore I'le leave this Hermaphroditical or neutral life to better underſtandings then mine. Likewiſe I muſt confeſs my diſability of conceiving the overſhadowing of his *Archeus*, and *how it brings this middle life into its firſt life*. For concerning Generation, I know of none

[a] *Ch.* called *Magnum oportet.*

that

that is performed by overſhadowing, except it be the miraculous conception of the bleſſed Virgin, as Holy Writ informs us; and I hope your *Author* will not compare his *Archeus* to the Holy Spirit; But how a middle life may be brought again into the firſt life, is altogether unconceivable to me: And ſo is that, when he ſays, that the *firſt life of the Fruit is the laſt of the ſeed*; for I cannot imagine, that the ſeed dies in the fruit; but, in my opinion, it lives rather in the fruit, and is numerouſly increaſed, as appears by the production of ſeed from the fruit. But the moſt difficult of all to be underſtood, are his *Ideas*, which he makes *certain ſeminal Images, Formal Lights, and operative means, whereby the ſoul moves and governs the body*; whoſe number and variety is ſo great, as it tranſcends my capacity, there being *Ideas* of Inclination, of Affection, of Conſideration or Judgment, of Paſsion, and theſe either mild, or violent, beſides a great number of Archeal and forreign Ideas. Truly, *Madam*, I cannot admire enough the powerful effects of theſe Ideas, they themſelves being no ſubſtances or material Creatures; For how that can pierce, ſeal, and print a figure, which hath neither ſubſtance nor matter, my reaſon is not able to comprehend, ſince there can be no figure without matter or ſubſtance, they being inſeparably united together, ſo, that where figure is, there is alſo ſubſtance, and where ſubſtance is, there is alſo figure; neither can any figure be made without a ſubſtance. You may ſay, Ideas, though they are not material or corporeal beings themſelves, yet they may put on figures, and take bodies when they pleaſe: I anſwer, That then they can do more then Immaterial Spirits; for the Learned ſay, That

Of the Ideas of Diſeaſes.

Immaterial

Immaterial Spirits are Immaterial ſubſtances; but your *Author* ſays, that Ideas are no ſubſtances; and I think it would be eaſier for a ſubſtance to take a body, then for that which is no ſubſtance: But your *Author* might have placed his Ideas as well amongſt the number of Immaterial Spirits, to wit, amongſt Angels and Devils, and then we ſhould not haye need to ſeek far for the cauſes of the different natures and diſpoſitions of Mankind, but we might ſay, that Ill-natured men proceeded from Evil, and Good-natured men from Good Spirits or Ideas. However, *Madam*, I do not deny Ideas, Images, or Conceptions of things, but I deny them onely to be ſuch powerful beings and Principal efficient Cauſes of Natural effects; eſpecially they being to your *Author* neither bodies nor ſubſtances themſelves. And as for the *Figure of a Cherry*, which your *Author* makes ſo frequent a repetition of, made by a longing Woman on her Child; I dare ſay that there have been millions of Women, which have longed for ſome or other thing, and have not been ſatisfied with their deſires, and yet their Children have never had on their bodies the prints or marks of thoſe things they longed for: but becauſe ſome ſuch figures are ſometimes made by the irregular motions of animate Matter, would this be a ſufficient proof, that all Conceptions, Ideas and Images have the like effects, after the ſame manner, by piercing or penetrating each other, and ſealing or printing ſuch or ſuch a figure upon the body of the Child? Laſtly, I cannot but ſmile when I read that your *Author* makes a *Diſeaſe proceed from a non-being to a ſubſtantial being*: Which if ſo, then a diſeaſe, according to his opinion, is made as the World was, that is, out of Nothing; but

ſurely luxurious perſons find it otherwiſe, who eat and drink more then their natural digeſtive motions can diſpoſe; for thoſe that have infirm bodies, cauſed by the irregular motions of animate matter, find that a diſeaſe proceeds from more then a *non*-being. But, *Madam*, I have neither ſuch an *Archeus*, which can produce, in my mind, an Idea of Conſent or approbation of theſe your *Authors* opinions, nor ſuch a light that is able to produce a beam of Patience to tarry any longer upon the examination of them; Wherefore I beg your leave to cut off my diſcourſe here, and onely to ſubſcribe my ſelf, as really I am,

MADAM,

Your humble and

faithful Servant.

XII.

MADAM,

I Cannot well apprehend your *Authors* meaning, when he ſays, [a] That *Nature doth riſe from its fall*; for if he underſtands Nature in general, I cannot imagine how ſhe ſhould fall and riſe; for though Man did fall, yet Nature never did, nor cannot fall, being Infinite: And therefore in another place, [b] when he ſaith, that *Nature firſt being a beautiful Virgin, was defiled by ſin; not by her own, but by Mans ſin, for whoſe uſe ſhe was created*; I think it too great a preſumption and

[a] *Ch.* Nature is ignorant of Contraries

[b] In the Hiſt. of *Tartar.*

and arrogancy to ſay that Infinite Nature was not onely defiled by the ſin of Man, but alſo to make Man the chief over all Nature, and to believe Nature was onely made for his ſake; when as he is but a ſmall finite part of Infinite Nature, and almoſt Nothing in compariſon to it. But I ſuppoſe your *Author* doth not underſtand Nature in general, but onely the nature of ſome Particulars, when he ſpeaks of the fall and riſe of Nature; however, this fall and riſe of the nature of Particulars, is nothing but a change of their natural motions. And ſo likewiſe, I ſuppoſe, he underſtands the nature of Particulars, when he ſays in another place; [c] That Nature in diſeaſes is ſtanding, ſitting, and lying; for ſurely Nature in general has more ſeveral poſtures then ſitting, ſtanding, or lying: As alſo when he ſpeaks [d] of the *Vertues and Properties that ſtick faſt in the boſom of Nature*, which I conceive to be a Metaphorical expreſsion; although I think it beſt to avoid Metaphorical, ſimilizing, and improper expreſsions in Natural Philoſophy, as much as one can; for they do rather obſcure then explain the truth of Nature; nay, your *Author* himſelf is of this opinion [e], and yet he doth nothing more frequent then bring in Metaphors and ſimilitudes. But to ſpeak properly, there is not any thing that ſticks faſt in the boſom of Nature, for Nature is in a perpetual motion: Neither can ſhe be *heightened or diminiſhed by Art*; for Nature will be Nature in deſpite of her Hand-maid. And as for your *Authors* opinion, That *there are no Contraries in Nature*, I am quite of a contrary mind, *viz.* that there is a Perpetual war and diſcord amongſt the parts of Nature, although not in the nature and ſubſtance of Infinite Matter, which is

[c] *Ch.* Diſeaſe is an unknown gueſt.

[d] Nature is ignorant of Contraries.

[e] *Ch.* The Image of the Ferment begets the Maſs with Child.

of a ſimple kind, and knows no contraries in it ſelf, but lives in Peace, when as the ſeveral actions are oppoſing and croſsing each other; and truly, I do not believe, that there is any part or Creature of Nature, that hath not met with oppoſers, let it be never ſo ſmall or great. But as War is made by the diviſion of Natures parts, and variety of natural actions, ſo Peace is cauſed by the unity and ſimplicity of the nature and eſſence of onely Matter, which Nature is peaceable, being always one and the ſame, and having nothing in it ſelf to be croſſed or oppoſed by; when as the actions of Nature, or natural Matter, are continually ſtriving againſt each other, as being various and different. Again your *Author* ſays, That *a Specifical being cannot be altered but by Fire, and that Fire is the Death of other Creatures: alſo that Alchymy, as it brings many things to a degree of greater efficacy, and ſtirs up a new being, ſo on the other hand again, it by a privy filching doth enfeeble many things.* I, for my part, wonder, that Fire, being as your *Author* ſays, no ſubſtantial body, but ſubſtanceleſs in its nature, ſhould work ſuch effects; but however, I believe there are many alterations without Fire, and many things which cannot be altered by Fire. What your *Author's* meaning is of a *new being*, I know not; for, to my reaſon, there neither is, nor can be made any new being in Nature, except we do call the change of motions and figures a new Creation; but then an old ſuit turned or dreſſed up may be called new too. Neither can I conceive his *Filching or Stealing*: For Nature has or keeps nothing within her ſelf, but what is her own; and ſurely ſhe cannot ſteal from her ſelf; nor can Art ſteal from Nature; ſhe may trouble Nature, or rather make

variety

variety in Nature, but not take any thing from her, for Art is the inſnarled motions of Nature: But your *Author*, being a Chymiſt, is much for the Art of Fire, although it is impoſsible for Art to work as Nature doth; for Art makes of natural Creatures artificial Monſters, and doth oftner obſcure and diſturb Natures ordinary actions, then prove any Truth in Nature. But Nature loving variety, doth rather ſmile at Arts follies, then that ſhe ſhould be angry with her curioſity: like as for example, a Poet will ſmile in expreſsing the part or action of a Fool. Wherefore Pure natural Philoſophers, ſhall by natural ſenſe and reaſon trace Natures ways, and obſerve her actions, more readily then Chymiſts can do by Fire and Furnaces; for Fire and Furnaces do often delude the Reaſon, blinc the Underſtanding, and make the Judgment ſtagger. Neverthleſs, your *Author* is ſo taken with Fire, that from thence he imagines a Formal Light, which he believes to be the Tip-top of Life; but certainly, he had in my opinion, not ſo much light as to obſerve, that all ſorts of light are but Creatures, and not Creators; for he judges of ſeveral Parts of Matter, as if they were ſeveral kinds of Matter, which cauſes him often to err, although he conceits himſelf without any Error. In which conceit I leave him, and reſt,

MADAM,

Your faithful Friend

and humble Servant

XIII.

MADAM,

THe Art of Fire, as I perceive, is in greater eſteem and reſpect with your *Author*, then Nature her ſelf: For he ſays, [a] That *ſome things can be done by Art, which Nature cannot do*; nay he calls [b] *Art* The *Miſtreſs of Nature, and ſubjects whole Nature unto Chymical ſpeculation*; For, *nothing*, ſays he, [c] *doth more fully bring a Man, that is greedy of knowing, to the knowledg of all things knowable, then the Fire; for the root or radical knowledg of natural things conſiſts in the Fire*: [d] *It pierces the ſecrets of Nature, and cauſes a further ſearching out in Nature, then all other Sciences, being put together; and pierces even into the utmoſt depths of real truth*: [e] *It creates things which never were before.* Theſe, and many more the like expreſsions, he has in the praiſe of Chymiſtry. And truly, *Madam*, I cannot blame your *Author*, for commending this Art, becauſe it was his own profeſsion, and no man will be ſo unwiſe as to diſpraiſe his own Art which he profeſſes; but whether thoſe praiſes and commendations do not exceed truth, and expreſs more then the Art of Fire can perform, I will let thoſe judg, that have more knowledg therein then I: But this I may ſay, That what Art or Science ſoever is in Nature, let it be the chief of all, yet it can never be call'd the Miſtreſs of Nature, nor be ſaid to perform more then Nature doth, except it be by a divine and ſupernatural Power;

[a] Ch. *Called*, The Eſſay of a Meteor.
[b] *Ch.* Heat doth not digeſt efficiently, but excitingly.
[c] *Ch.* The ignorant natural Philoſophy of *Ariſtotle* and *Galen.*
[d] *Ch.* A modern Pharmacapoly and diſpenſatory.
[e] *Ch.* Of the Power of Medicines.

Power; much leſs to create things which never were before, for this is an action which onely belongs to God: The truth is, Art is but a Particular effect of Nature, and as it were, Nature's Mimick or Fool, in whoſe playing actions ſhe ſometimes takes delight; nay, your *Author* confeſſes it himſelf, when he calls the *Art* of *Chymiſtry, Nature's emulating Ape*, and *her Chamber-maid*, and yet he ſays, *ſhe is now and then the Miſtreſs of Nature*; which in my opinion doth not agree: for I cannot conceive how it is poſsible to be a Chamber-maid, and yet to be the Miſtreſs too; I ſuppoſe your *Author* believes, they juſtle ſometimes each other out, or take by turns one anothers place. But whatever his opinion be, I am ſure, that the Art of Fire cannot create and produce ſo, as Nature doth, nor diſſolve ſubſtances ſo as ſhe doth, nor transform and tranſchange, as ſhe doth, nor do any effect like Nature: And therefore I cannot ſo much admire this Art as others do, for it appears to me, rather to be a troubler, then an aſsiſtant to Nature, producing more Monſters then perfect Creatures; nay, it rather doth ſhut the Gates of Truth, then unlock the Gates of Nature: For how can Art inform us of Nature, when as it is but an effect of Nature? You may ſay, The cauſe cannot be better known then by its effect; for the knowledg of the effect, leads us to the knowledg of the cauſe. I anſwer, 'Tis true: but you will conſider, that Nature is an Infinite cauſe, and has Infinite effects; and if you knew all the Infinite effects in nature, then perhaps you might come to ſome knowledg of the cauſe; but to know nature by one ſingle effect, as art is, is impoſsible; nay, no man knows this particular effect as yet perfectly; For who is he, that

[s] *Ch.* Heat doth not digeſt efficiently, but excitingly.

has

has ſtudied the art of fire ſo, as to produce all that this art may be able to afford: witneſs the Philoſophers-ſtone. Beſides, how is it poſsible to find out the onely cauſe by ſo numerous variations of the effects? Wherefore it is more eaſie, in my opinion, to know the various effects in Nature by ſtudying the Prime cauſe, then by the uncertain ſtudy of the inconſtant effects to arrive to the true knowledg of the prime cauſe; truly it is much eaſier to walk in a Labyrinth without a Guide, then to gain a certain knowledg in any one art or natural effect, without Nature her ſelf be the guide, for Nature is the onely Miſtreſs and cauſe of all, which, as ſhe has made all other effects, ſo ſhe has alſo made arts for varieties ſake; but moſt men ſtudy Chymiſtry more for imployment, then for profit; not but *that I believe*, there may be ſome excellent Medicines found out and made by that art, but the expence and labour is more then the benefit; neither are all thoſe Medicines ſure and certain, nor in all diſeaſes ſafe; neither can this art produce ſo many medicines as there are ſeveral diſeaſes in Nature, and for the Univerſal Medicine, and the Philoſophers-ſtone or Elixir, which Chymiſts brag of ſo much; it conſiſts rather in hope and expectation, then in aſſurance; for could Chymiſts find it out, they would not be ſo poor, as moſt commonly they are, but richer then *Solomon* was, or any Prince in the World, and might have done many famous acts with the ſupply of their vaſt Golden Treaſures, to the eternal and immortal fame of their Art; nay, Gold being the Idol of this world, they would be worſhipped as well for the ſake of Gold, as for their ſplendorous Art; but how many have endeavored and laboured in vain and without

without any effect? *Gold is eaſier to be made, then to be deſtroyed*, ſays your *Author*[a], but I believe one is as difficult or impoſsible, nay more, then the other; for there is more probability of diſſolving or deſtroying a natural effect by Art, then of generating or producing one; for Art cannot go beyond her ſphere of activity, ſhe can but produce an artificial effect, and Gold is a natural Creature; neither were it Juſtice, that a particular creature of Nature ſhould have as much power to act or work as Nature her ſelf; but becauſe neither Reaſon, nor Art has found out as yet ſuch a powerful oppoſite to Gold, as can alter its nature; men therefore conclude that it cannot be done. Your *Author* relates[a] to have ſeen the Gold-making ſtone, which he ſays, was of colour ſuch, as Saffron is in its powder, but weighty and ſhining like unto powder'd Glaſs; one fourth part of one grain thereof, (a grain he reckons the ſix hundredth part of one ounce) being projected upon eight ounces of Quickſilver made hot in a Crucible, and ſtraight way there were found eight ounces, and a little leſs then eleven grains of the pureſt Gold; therefore one onely grain of that powder had tranſchanged 19186 parts of Quickſilver, equal to it ſelf, into the beſt Gold. Truly, *Madam*, I wiſh with all my heart, the poor Royaliſts had had ſome quantity of that powder; and I aſſure you, that if it were ſo, I my ſelf would turn a Chymiſt to gain ſo much as to repair my Noble Husbands loſſes, that his noble family might flouriſh the better. But leaving Gold; ſince it is but a vain wiſh, I do verily believe, that ſome of the Chymical medicines do, in ſome deſperate caſes, many times produce more powerful and ſudden effects then the

[a] *Ch.* The firſt Principles of the Chymiſts, nor the Eſſences of the ſame are the Army Diſeaſes.

[a] In the Of Life eternal, and the *Ch.* the Tree Life.

medicines of Galeniſts, and therefore I do not abſolutely condemn the art of Fire, as if I were an enemy to it; but I am of an opinion, that my Opinions in *Philoſophy*, if well underſtood, will rather give a light to that art, then obſcure its worth; for if Chymiſts did but ſtudy well the corporeal motions or actions of Natures ſubſtantial body; they would, by their obſervations, underſtand Nature better, then they do by the obſervation of the actions of their Art; and out of this conſideration and reſpect, I ſhould almoſt have an ambition, to become an Artiſt in Chymiſtry, were I not too lazie and tender for that imployment; but ſhould I quit the one, and venture the other, I am ſo vain as to perſwade my ſelf, I might perform things worthy my labour upon the ground of my own Philoſophy, which is ſubſtantial Life, Senſe, and Reaſon; for I would not ſtudy Salt, Sulphur, and Mercury, but the Natural motions of every Creature, and obſerve the variety of Natures actions. But, perchance, you will ſmile at my vain conceit, and, it may be, I my ſelf, ſhould repent of my pains unſucceſsfully beſtowed, my time vainly ſpent, my health raſhly endangered, and my Noble Lords Eſtate unprofitably waſted, in fruitleſs tryals and experiments; Wherefore you may be ſure, that I will conſider well before I act; for I would not loſe Health, Wealth, and Fame, and do no more then others have done, which truly is not much, their effects being of leſs weight then their words. But in the mean time, my ſtudy ſhall be bent to your ſervice, and how to expreſs my ſelf worthily,

MADAM,

Your Ladiſhips

humble and faithful Servant.

MA-

XIV.

MADAM,

I Have read your *Authors* diſcourſe concerning *Senſation*[a], but it was as difficult to me to underſtand it, as it was tedious to read it; Truly, all the buſineſs might have have been eaſily declared in a ſhort Chapter, and with more clearneſs and perſpicuity: For Senſation, is nothing elſe but the action of ſenſe proceeding from the corporeal ſenſitive motions, which are in all Creatures or parts of Nature, and ſo all have ſenſe and ſenſation, although not alike after one and the ſame manner, but ſome more, ſome leſs, each according to the nature and propriety of its figure. But your *Author* ſpeaks of *Motion without Senſe, and Senſe without Motion*, which is a meer impoſsibility; for there is not, nor cannot be any Motion in Nature without Senſe, nor any Senſe without Motion; there being no Creature without ſelf-motion, although not always perceptible by us, or our external ſenſes; for all motion is not exteriouſly local, and viſible. Wherefore, not any part of Nature, according to my opinion, wants Senſe and Reaſon, Life and Knowledg; but not ſuch a ſubſtanceleſs Life as your *Author* deſcribes, but a ſubſtantial, that is, a corporeal Life. Neither is Light the principle of Motion, but Motion is the principle of Light: Neither is Heat the principle of Motion,

[a] Of the Diſeaſe of the Stone. *Ch.* 9.

Motion, but its effect as well as Cold is; for I cannot perceive that Heat ſhould be more active then Cold. Neither is there any ſuch thing as Unſenſiblenes in Nature, except it be in reſpect of ſome particular Senſation in ſome particular Figure: As for example, when an Animal dies, or its Figure is diſſolved from the Figure of an Animal; we may ſay it hath not animal ſenſe or motion, but we cannot ſay, it hath no ſenſe or motion at all; for as long as Matter is in Nature, Senſe and Motion will be; ſo that it is abſurd and impoſsible to believe, or at leaſt to think, that Matter, as a body, can be totally deprived of Life, Senſe, and Motion, or that Life can periſh and be corrupted, be it the ſmalleſt part of Matter conceivable, and the ſame turned or changed into millions of Figures; for the Life and Soul of Nature is ſelf-moving Matter, which by Gods Power, and leave, is the onely Framer and Maker, as alſo the Diſſolver and Transformer of all Creatures in Nature, making as well Light, Heat, and Cold, Gas, Blas, and Ferments, as all other natural Creatures beſide, as alſo Paſsions, Appetites, Digeſtions, Nouriſhments, Inclination, Averſion, Sickneſs and Health; nay, all Particular Ideas, Thoughts, Fancies, Conceptions, Arts, Sciences, *&c.* In brief, it makes all that is to be made in Nature. But many great Philoſophers conceive Nature to be fuller of Intricacy, Difficulty, and Obſcurity, then ſhe is, puzling themſelves about her ordinary actions, which yet are eaſie and free, and making their arguments hard, conſtrained, and myſtical, many of them containing neither ſenſe nor reaſon; when as, in my opinion, there is nothing elſe to be

ſtudied

studied in Nature, but her substance and her actions. But I will leave them to their own Fancies and Humors, and say no more, but rest,

MADAM,

Your humble and

faithful Servant.

XV.

MADAM,

CConcerning Sympathy and Antipathy, and attractive or magnetick Inclinations, which some do ascribe to the influence of the Stars, others to an unknown Spirit as the Mover, others to the Instinct of Nature, hidden Proprieties, and certain formal Vertues; but your *Author* [a] doth attribute to *directing Ideas, begotten by their Mother Charity, or a desire of Good Will,* and calls it [b] a *Gift naturally inherent in the Archeusses of either part:* If you please to have my opinion thereof, I think they are nothing else but plain ordinary Passions and Appetites. As for example: I take Sympathy, as also Magnetisme or attractive Power, to be such agreeable Motions in one part or Creature, as do cause a Fancy, love and desire to some other part or Creature; and Antipathy, when these Motions are disagreeable, and produce contrary effects, as dislike, hate and aversion to some part or Creature. And as there are many sorts of such motions, so there are

[a] *Ch.* Of Sympathetical Mediums

[b] In the Plague-Grave.

many ſorts of Sympathyes and Antipathyes, or Attractions and Averſions, made ſeveral manners or ways; For in ſome ſubjects, Sympathy requires a certain diſtance; as for example, in Iron and the Loadſtone; for if the Iron be too far off, the Loadſtone cannot exerciſe its power, when as in other ſubjects, there *is no* need of any ſuch certain diſtance, as betwixt the Needle and the North-pole, as alſo the Weapon-ſalve; for the Needle will turn it ſelf towards the North, whether it be near or far off from the North-pole; and ſo, be the Weapon which inflicted the wound, never ſo far from the wounded Perſon, as they ſay, yet it will nevertheleſs do its effect: But yet there muſt withal be ſome conjunction with the blood; for as your *Author* mentions *, the Weapon ſhall be *in vain* anointed with the Unguent, unleſs it be made bloody, and the ſame blood be firſt dried on the ſame Weapon. Likewiſe the ſounding of two eighs when one is touched, muſt be done *within a certain diſtance*: the ſame may be ſaid of all Infectious and catching Diſeaſes amongſt Animals, where the Infection, be it the Infected Air, or a Poyſonous Vapour, or any thing elſe, muſt needs touch the body, and enter either through the Mouth, or Noſtrils, or Ears, or Pores of the body; for though the like Antipathies of Infectious Diſeaſes, as of the Plague, may be in ſeveral places far diſtant and remote from each other at one and the ſame time, yet they cannot infect particular Creatures, or Animals, without coming near, or without the ſenſe of Touch: For example; the Plague may be in the *Eaſt Indies*, and in this Kingdom, at one and the ſame time, and yet be ſtrangers to each other; for although all Men are of Mankind,

In the Magnetick Cure of Wounds.

Mankind, yet all have not Sympathy or Antipathy to each other; the like of ſeveral Plagues, although they be of the ſame kind of diſeaſe, yet, being in ſeveral places at one time, they may not be a kin to each other, nor one be produced by the other, except the Plague be brought over out of an infected Country, into a ſound Country, by ſome means or other. And thus ſome Sympathy and Antipathy is made by a cloſe conjunction, or corporeal uniting of parts, but not all; neither is it required, that all Sympathy and Antipathy muſt be mutual, or equally in both Parties, ſo that that part or party, which has a Sympathetical affection or inclination to the other, muſt needs receive the like ſympathetical affection from that part again; for one man may have a ſympathetical affection to another man, when as this man hath an antipathetical averſion to him; and the ſame may be, for ought we know, betwixt Iron and the Loadſtone, as alſo betwixt the Needle and the North; for the Needle may have a ſympathy towards the North, but not again the North towards the Needle; and ſo may the Iron have towards the Loadſtone, but not again the Loadſtone towards the Iron: Neither is Sympathy or Antipathy made by the iſſuing out of any inviſible rayes, for then the rays betwixt the North and the Needle would have a great way to reach: But a ſympathetical inclination in a Man towards another, is made either by ſight, or hearing; either preſent, or abſent: the like of infectious Diſeaſes. I grant, that if both Parties do mutually affect each other, and their motions be equally agreeable; then the ſympathy is the ſtronger, and will laſt the longer, and then there is a Union, Likeneſs, or

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Conformableneſs, of their Actions, Appetites, and Paſsions; For this kind of Sympathy works no other effects, but a conforming of the actions of one party, to the actions of the other, as by way of Imitation, proceeding from an internal ſympathetical love and deſire to pleaſe; for Sympathy doth not produce an effect really different from it ſelf, or elſe the ſympathy betwixt Iron and the Loadſtone would produce a third Creature different from themſelves, and ſo it would do in all other Creatures. But as I mentioned above, there are many ſorts of attractions in Nature, and many ſeveral and various attractions onely in one ſort of Creatures, nay, ſo many in one particular as not to be numbred; for there are many Deſires, Paſsions, and Appetites, which draw or intice a man to ſomething or other, as for example, to Beauty, Novelty, Luxury, Covetouſneſs, and all kinds of Vertues and Vices; and there are many particular objects in every one of theſe, as for example, in Novelty: For there are ſo many ſeveral deſires to Novelty, as there are Senſes, and ſo many Novelties that ſatisfie thoſe deſires, as a Novelty to the Ear, a Novelty to the Sight, to Touch, Taſte, and Smell; beſides in every one of theſe, there are many ſeveral objects; To mention onely one example, for the novelty of Sight; I have ſeen an Ape, dreſt like a Cavalier, and riding on Horſe-back with his ſword by his ſide, draw a far greater multitude of People after him, then a Loadſtone of the ſame bigneſs of the Ape would have drawn Iron; and as the Ape turn'd, ſo did the People, juſt like as the Needle turns to the North; and this is but one object in one kind of attraction, *viz.* Novelty: but there be Millions

lions of objects beſides. In like manner good Cheer draws abundance of People, as is evident, and needs no Demonſtration. Wherefore, as I ſaid in the beginning, Sympathy is nothing elſe but natural Paſſions and Appetites, as Love, Deſire, Fancy, Hunger, Thirſt, *&c.* and its effects are Concord, Unity, Nouriſhment, and the like: But Antipathy is Diſlike, Hate, Fear, Anger, Revenge, Averſion, Jealouſie, *&c.* and its effects are Diſcord, Diviſion, and the like. And ſuch an Antipathy is between a Wolf and a Sheep, a Hound and a Hare, a Hawk and a Partridg, *&c.* For this Antipathy is nothing elſe but fear in the Sheep to run away from the Wolf, in the Hare to run from the Hound, and in the Partridg to flie from the Hawk; for Life has an Antipathy to that which is named Death; and the Wolfs ſtomack hath a ſympatuy to food, which cauſes him to draw neer, or run after thoſe Creatures he has a mind to feed on. But you will ſay, ſome Creatures will fight, and kill each other, not for Food, but onely out of an Antipathetical nature. I anſwer: When as Creatures fight, and endeavour to deſtroy each other, if it be not out of neceſsity, as to preſerve and defend themſelves from hurt or danger, then it is out of revenge, or anger, or ambition, or jealouſie, or cuſtom of quarrelling, or breeding. As for example: Cocks of the Game, that are bred to fight with each other, and many other Creatures, as Bucks, Staggs, and the like, as alſo Birds, will fight as well as Men, and ſeek to deſtroy each other through jealouſie; when as, had they no Females amongſt them, they would perhaps live quiet enough, rather as ſympathetical Friends, then

antipathetical Foes; and all ſuch Quarrels proceed from a ſympathy to their own intereſt. But you may ask me, what the reaſon is, that ſome Creatures, as for example, Mankind, ſome of them, will not onely like one ſort of meat better then another of equal goodneſs and nouriſhment, but will like and prefer ſometimes a worſe ſort of meat before the beſt, to wit, ſuch as hath neither a good taſte nor nouriſhment? I anſwer: This is nothing elſe, but a particular, and moſt commonly an inconſtant Appetite; for after much eating of that they like beſt, eſpecially if they get a ſurfeit, their appetite is chang'd to averſion; for then all their feeding motions and parts have as much, if not more antipathy to thoſe meats, as before they had a ſympathy to them. Again, you may ask me the reaſon, why a Man ſeeing two perſons together, which are ſtrangers to him, doth affect one better then the other; nay, if one of theſe Perſons be deformed or ill-favoured, and the other well-ſhaped and handſom; yet it may chance, that the deformed Perſon ſhall be more acceptable in the affections and eyes of the beholder, then he that is handſom? I anſwer: There is no Creature ſo deformed, but hath ſome agreeable and attractive parts, unleſs it be a Monſter, which is never loved, but for its rarity and novelty, and Nature is many times pleaſed with changes, taking delight in variety: and the proof that ſuch a ſympathetical affection proceeds from ſome agreeableneſs of Parts, is, that if thoſe perſons were vail'd, there would not proceed ſuch a partial choice or judgment from any to them. You may ask me further, whether Paſſion and Appetite are alſo the cauſe of the ſympathy which is in the Loadſtone towards Iron, and in the

Needle

Needle towards the North? I anſwer, Yes: for it is either for nouriſhment, or refreſhment, or love and deſire of aſſociation, or the like, that the Loadſtone draws Iron, and the Needle turns towards the North. The difference onely betwixt the ſympathy in the Needle towards the North, and betwixt the ſympathy in the Loadſtone towards the Iron is, that the Needle doth always turn towards the North, but the Loadſtone doth not always draw Iron: The reaſon is, becauſe the ſympathy of the Needle towards the North requires no certain diſtance, as I ſaid in the beginning; and the North-pole continuing conſtantly in the ſame place, the Needle knows whither to turn; when as the ſympathy between the Loadſtone and Iron requires a certain diſtance, and when the Loadſtone is not within this compaſs or diſtance, it cannot perform its effect, to wit, to draw the Iron, but the effect ceaſes, although the cauſe remains in vigour. The ſame may be ſaid of the Flower that turns towards the Sun; for though the Sun be out of ſight, yet the Flower watches for the return of the Sun, from which it receives benefit: Like as faithful Servants watch and wait for their Maſter, or hungry Beggers at a Rich man's door for relief; and ſo doth the aforeſaid Flower; nay, not the Flower onely, but any thing that has freedom and liberty of motion, will turn towards thoſe Places or Creatures whence it expects relief. Concerning ravenous Beaſts that feed on dead Carcaſſes, they, having more eager appetites then food, make long flights into far diſtant Countries to ſeek food to live on, but ſurely, I think, if they had food enough at home, although not dead Carcaſſes, they would not make ſuch great Journies; or if a battel

were

were fought, and many ſlain, and they upon their journey ſhould meet with ſufficient food, they would hardly travel further before they had devoured that food firſt: But many Birds travel for the temper of the Air, as well as for food, witneſs Woodcocks, Cranes, Swallows, Fieldfares, and the like; ſome for cold, ſome for hot, and ſome for temperate Air. And as for ſuch Diſeaſes as are produced by conceit and at diſtance, the cauſe is, the fearfulneſs of the Patient, which produces Irregularities in the Mind, and theſe occaſion Irregularities in the Body, which produce ſuch a diſeaſe, as the Mind did fearfully apprehend; when as without that Paſsion and Irregularity, the Patient would, perhaps, not fall ſick of that diſeaſe. But to draw towards an end, I'le anſwer briefly to your *Authors alledged* example * which he gives of Wine, that it is troubled while the Vine flowreth: The reaſon, in my opinion, may perhaps be, that the Wine being the effect of the Vine, and proceeding from its ſtock as the producer, has not ſo quite alter'd Nature, as not to be ſenſible at all of the alteration of the Vine; For many effects do retain the proprieties of their cauſes; for example, many Children are generated, which have the ſame proprieties of their Parents, who do often propagate ſome or other vertuous or vitious qualities with their offſpring; And this is rather a proof that there are ſenſitive and rational motions, and ſenſitive and rational knowledge in all Creatures, and ſo in Wine, according to the nature or propriety of its Figure; for without motion, ſenſe and reaſon, no effect could be; nor no ſympathy or antipathy. But it is to be obſerved, that many do miſtake the true Cauſes, and aſcribe an effect to ſome

* *Ch.* Of the Magnetick Power.

ſome cauſe, which is no more the cauſe of that ſame effect, then a particular Creature is the cauſe of Nature; and ſo they are apt to take the Fiddle for the hot Bricks, as if the Fiddle did make the Aſs dance, when as it was the hot Bricks that did it; for ſeveral effects may proceed from one cauſe, and one effect from ſeveral cauſes; and ſo in the aforeſaid example, the Wine may perhaps be diſturbed by the alteration of the weather at the ſame time of the flowring of the Vines; and ſo may Animals, as well as Vegetables, and other Creatures, alter alike at one and the ſame point of time, and yet none be the cauſe of each others alteration. And thus, to ſhut up my diſcourſe, I repeat again, that ſympathy and antipathy are nothing elſe but ordinary Paſſions and Appetites amongſt ſeveral Creatures, which Paſsions are made by the rational animate Matter, and the Appetites by the ſenſitive, both giving ſuch or ſuch motions, to ſuch or ſuch Creatures; for croſs motions in Appetites and Paſsions make Antipathy, and agreeable motions in Appetites and Paſsions make Sympathy, although the Creatures be different, wherein theſe motions, Paſsions and Appetites are made; and as without an object a Pattern cannot be, ſo without inherent or natural Paſsions and Appetites there can be no Sympathy or Antipathy: And there being alſo ſuch Sympathy betwixt your Ladiſhip and me, I think my ſelf the happieſt Creature for it, and ſhall make it my whole ſtudy to imitate your Ladiſhip, and conform all my actions to the rule and pattern of yours, as becomes

MADAM,

Your Ladiſhips

faithful Friend, and humble Servant.

XVI.

MADAM,

MY opinion of Witches and Witchcraft, (of whoſe Power and ſtrange effects your *Author* is pleaſed to relate many ſtories) in brief, is this; My Senſe and Reaſon doth inform me, that there is Natural Witchcraft, as I may call it, which is Sympathy, Antipathy, Magnetiſme, and the like, which are made by the ſenſitive and rational motions between ſeveral Creatures, as by Imagination, Fancy, Love, Averſion, and many the like; but theſe *Motions*, being ſometimes unuſual and ſtrange to us, we not knowing their cauſes, (For what Creature knows all motions in Nature, and their ways?) do ſtand amazed at their working power; and by reaſon we cannot aſsign any Natural cauſe for them, are apt to aſcribe their effects to the Devil; but that there ſhould be any ſuch deviliſh Witchcraft, which is made by a Covenant and Agreement with the Devil, by whoſe power Men do enchaunt or bewitch other Creatures, I cannot readily believe. Certainly, I dare ſay, that many a good, old honeſt woman hath been condemned innocently, and ſuffered death wrongfully, by the ſentence of ſome fooliſh and cruel Judges, meerly upon this ſuſpition of Witchcraft, when as really there hath been no ſuch thing; for many things are done by ſlights or juggling Arts, wherein neither the Devil nor Witches are Actors. And thus an Engliſh-man whoſe name was

Banks,

Banks, was like to be burnt beyond the Seas for a Witch, as I have been inform'd; onely for making a Horſe ſhew tricks by Art; There have been alſo ſeveral others; as one that could vomit up ſeveral kinds of Liquors and other things: and another who did make a Drum beat of it ſelf. But all theſe were nothing but ſlights and jugling tricks; as alſo the talking and walking Bell; and the Brazen-Head which ſpake theſe words, *Time was*, *Time is*, and *Time is paſt*, and ſo fell down; Which may eaſily have been performed by ſpeaking through a Pipe conveighed into the ſaid head: But ſuch and the like trifles will amaze many grave and wiſe men, when they do not know the manner or way how they are done, ſo as they are apt to judg them to be effected by Witchcraft or Combination with the Devil. But, as I ſaid before, I believe there is Natural Magick; which is, that the ſenſitive and rational Matter oft moves ſuch a way, as is unknown to us; and in the number of theſe is alſo the bleeding of a murdered body at the preſence of the Murderer, which your *Author*[a] mentions; for the corporeal motions in the murthered body may move ſo, as to work ſuch effects, which are more then ordinary; for the animal Figure, being not ſo quickly diſſolved, the animal motions are not ſo ſoon altered, (for the diſſolving of the Figure is nothing elſe but an alteration of its Motions;) and this diſſolution is not done in an inſtant of time, but by degrees: But yet I muſt confeſs, it is not a common action in Nature, for Nature hath both common, and ſingular or particular actions: As for example, Madneſs, natural Folly, and many the like, are but in ſome particular perſons; for if thoſe actions were general, and common, then all,

[a] *Ch.* Of the Magnetick cure of wounds.

or

or moſt men would be either mad, or fools, but, though there are too many already, yet all men are not ſo; and ſo ſome murthered bodies may bleed or expreſs ſome alterations at the preſence of the Murtherer, but I do not believe, that all do ſo; for ſurely in many, not any alteration will be perceived, and others will have the ſame alterations without the preſence of the Murtherer. And thus you ſee, *Madam*, that this is done naturally, without the help of the Devil; nay, your *Author* doth himſelf confeſs it to be ſo; for, ſays he; *The act of the Witch is plainly Natural; onely the ſtirring up of the vertue or power in the Witch comes from Satan.* But I cannot underſtand what your *Author* means; by the departing of ſpiritual rays from the Witch into Man, or any other animal, which ſhe intends to kill or hurt; nor how Spirits wander about in the Air; and have their manſions there; for men may talk as well of impoſsibilities, as of ſuch things which are not compoſed of Natural Matter: If man were an Incorporeal Spirit himſelf, he might, perhaps, ſooner conceive the eſſence of a Spirit, as being of the ſame Nature; but as long as he is material, and compoſed of Natural Matter, he might as well pretend to know the Eſſence of God, as of an Incorporeal Spirit. Truly, I muſt confeſs, I have had ſome fancies oftentimes of ſuch pure and ſubtil ſubſtances, purer and ſubtiler then the Sky or Æthereal ſubſtance is, whereof I have ſpoken in my Poetical Works; but theſe ſubſtances, which I conceived within my fancy, were material, and had bodies, though never ſo ſmall and ſubtil; for I was never able to conceive a ſubſtance abſtracted from all Matter, for even Fancy it ſelf is material, and all Thoughts and Conceptions

are

are made by the rational Matter, and ſo are thoſe which Philoſophers call Animal Spirits, but a material Fancy cannot produce immaterial effects, that is, Ideas of Incorporeal Spirits: And this was the cauſe that in the firſt impreſsion of my *Philoſophical Opinions*, I named the ſenſitive and rational Matter, ſenſitive and rational Spirits, becauſe of its ſubtilty, activity and agility; not that I thought them to be immaterial, but material Spirits: but ſince Spirits are commonly taken to be immaterial, and Spirit and Body are counted oppoſite to one another, to prevent a miſapprehenſion in the thoughts of my Readers, as if I meant Incorporeal Spirits, I altered this expreſsion in the laſt Edition, and call'd it onely ſenſitive and rational Matter, or, which is all one, ſenſitive and *rational corporeal motions*. You will ſay, perhaps, That the divine Soul in Man is a Spirit: but I deſire you to call to mind what I oftentimes have told you, to wit, that when I ſpeak of the Soul of Man, I mean onely the Natural, not the Divine Soul; which as ſhe is ſupernatural, ſo ſhe acts alſo ſupernaturally; but all the effects of the natural Soul, of which I diſcourſe, are natural, and not divine or ſupernatural. But to return to Magnetiſme; I am abſolutely of opinion, that it is naturally effected by natural means, without the concurrence of Immaterial Spirits either good or bad, meerly by natural corporeal ſenſitive and rational motions; and, for the moſt part, there muſt be a due approach between the Agent and the Patient, or otherwiſe the effect will hardly follow, as you may ſee by the Loadſtone and Iron; Neither is the influence of the Stars performed beyond a certain diſtance, that is, ſuch a diſtance as is beyond ſight or their natural power to

work; for if their light comes to our Eyes, I know no reaſon againſt it, but their effects may come to our bodies. And as for infectious Diſeaſes, they come by a corporeal imitation, as by touch, either of the infected air, drawn in by breath, or entring through the Pores of the Body, or of ſome things brought from infected places, or elſe by hearing; but diſeaſes, cauſed by Conceit, have their beginning, as all alterations have, from the ſenſitive and rational Motions, which do not onely make the fear and conceit, but alſo the diſeaſe; for as a fright will ſometimes cure diſeaſes, ſo it will ſometimes cauſe diſeaſes; but as I ſaid, both fright, cure, and the diſeaſe, are made by the rational and ſenſitive corporeal motions within the body, and not by Supernatural Magick, as Satanical Witchcraft, entering from without into the body by ſpiritual rays. But having diſcourſed hereof in my former Letter, I will not trouble you with an unneceſſary repetition thereof; I conclude therefore with what I begun, *viz.* that I believe natural Magick to be natural corporeal motions in natural bodies: Not that I ſay, Nature in her ſelf is a Magicianeſs, but it may be called natural Magick or Witchcraft, meerly in reſpect to our Ignorance; for though Nature is old, yet ſhe is not a Witch, but a grave, wiſe, methodical Matron, ordering her Infinite family, which are her ſeveral parts, with eaſe and facility, without needleſs troubles and difficulties; for theſe are onely made through the ignorance of her ſeveral parts or particular Creatures, not underſtanding their Miſtreſs, Nature, and her actions and government, for which they cannot be blamed; for how ſhould a part *under-*

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ſtand the Infinite body, when it doth not underſtand it ſelf; but Nature underſtands her parts better, then they do her. And ſo leaving Wiſe Nature, and the Ignorance of her Particulars, I underſtand my ſelf ſo far, that I am,

MADAM,

Your humble and

faithful Servant.

XVII.

MADAM,

I Am not of your *Authors* * opinion, *That Time hath no relation to Motion, but that Time and Motion are as unlike and different from each other as Finite from Infinite, and that it hath its own eſſence or being Immoveable, Unchangeable, Individable, and unmixed with things, nay, that Time is plainly the ſame with Eternity.* For, in my opinion, there can be no ſuch thing as Time in Nature, but what Man calls Time, is onely the variation of natural motions; wherefore Time, and the alteration of motion, is one and the ſame thing under two different names; and as Matter, Figure, and Motion, are inſeparable, ſo is Time inſeparably united, or rather the ſame thing with them, and not a thing ſubſiſting by it ſelf; and as long as Matter, Motion and Figure have been exiſtent, ſo long hath Time: and as long as they laſt, ſo long doth Time.

* In his Treatiſe of Time.

But

But when I ſay, Time is the variation of motion, I do not mean the motion of the Sun or Moon, which makes Days, Months, Years, but the general motions or actions of Nature, which are the ground of Time; for were there no Motion, there would be no Time; and ſince Matter is dividable, and in parts, Time is ſo too; neither hath Time any other Relation to Duration, then what Nature her ſelf hath. Wherefore your *Author* is miſtaken, when he ſays, Motion is made in Time, for Motion makes Time, or rather is one and the ſame with Time; and Succeſſion is no more a ſtranger to Motion, then Motion is to Nature, as being the action of Nature, which is the Eternal ſervant of God. *But*, ſays he, *Certain Fluxes of Formerlineſſes and Laterneſſes, have reſpect unto frail moveable things in their motions, wherewith they haſten unto the appointed ends of their period, and ſo unto their own death or deſtruction; but what relation hath all that to Time: for therefore alſo ought Time to run with all and every motion? Verily ſo there ſhould be as many times and durations as there are motions.* I anſwer: To my Reaſon, there are as many times and durations as there are motions; for neither time nor duration can be ſeparated from motion, no more then motion can be ſeparated from them, being all one. But Time is not Eternity, for Eternity hath no change, although your *Author* makes Time and Eternity all one, and a being or ſubſtance by it ſelf: Yet I will rather believe *Solomon*, then him, who ſays, that there is a time to be merry, and a time to be ſad; a time to mourn, and a time to rejoyce, and ſo forth: making

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ſo many diviſions of Time as there are natural actions; whenas your *Author* makes natural actions ſtrangers to Nature, dividing them from their ſubſtances: Which ſeemeth very improbable in the opinion of,

MADAM,

Your Ladiſhips

faithful Friend, and humble Servant.

XVIII.

MADAM,

YOur *Authors*[a] opinion is, That *a bright burning Iron doth not burn a dead Carcaſs after an equal manner as it doth a live one; For in live bodies,* ſaith he, *it primarily hurts the ſenſitive Soul, the which therefore being impatient, rages after a wonderful manner, doth by degrees reſolve and exaſperate its own and vital liquors into a ſharp poyſon, and then contracts the fibres of the fleſh, and turns them into an eſcharre, yea, into the way of a coal; but a dead Carcaſs is burnt by bright burning Iron, no otherwiſe, then if Wood, or if any other unſenſitive thing ſhould be; that is, it burns by a proper action of the fire, but not of the life.* To which opinion, I anſwer: That my Reaſon cannot conceive any thing to be without life, and ſo neither without ſenſe; for whatſoever hath ſelf-motion, has ſenſe and life; and that ſelf-motion is in every Creature, is ſufficiently diſcourſed of in my former Letters, and in my *Philoſo-*

[a] Of the diſeaſe of the Stone, *Ch.* 9.

phical Opinions; for ſelf-motion, ſenſe, life, and reaſon, are the grounds and principles of Nature, without which no Creature could ſubſiſt. I do not ſay, That there is no difference between the life of a dead Carcaſs, and a live one, for there is a difference between the lives of every Creature; but to differ in the manner of life, and to have neither life nor ſenſe at all, are quite different things: But your *Author* affirms himſelf, that all things have a certain ſenſe of feeling, when he ſpeaks of Sympathy and Magnetiſme, and yet he denies that they have life: And others again, do grant life to ſome Creatures, as to Vegetables, and not ſenſe. Thus they vary in their Opinions, and divide ſenſe, life, and motion, when all is but one and the ſame thing; for no life is without ſenſe and motion, nor no motion without ſenſe and life; nay, not without Reaſon; for the chief Architect of all Creatures, is ſenſitive and rational Matter. But the miſtake is, that moſt men, do not, or will not conceive, that there is a difference and variety of the corporeal ſenſitive and rational motions in every Creature; but they imagine, that if all Creatures ſhould have life, ſenſe, and reaſon, they muſt of neceſsity have all alike the ſame motions, without any difference; and becauſe they do not perceive the animal motions in a Stone or Tree, they are apt to deny to them all life, ſenſe, and motion. Truly, *Madam*, I think no man will be ſo mad, or irrational, as to ſay a Stone is an Animal, or an Animal is a Tree, becauſe a Stone and Tree have ſenſe, life, and motion; for every body knows, that their Natural figures are different, and if their Natures be different, then they cannot have the ſame Motions, for the corporeal motions

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do make the nature of every particular Creature, and their differences; and as the corporeal motions act, work, or move, ſo is the nature of every figure, Wherefore, no body, I hope, will count me ſo ſenſeleſs, that I believe ſenſe and life to be after the like manner in every particular Creature or part of Nature; as for example, that a Stone or Tree has animal motions, and doth ſee, touch, taſte, ſmell and hear by ſuch ſenſitive organs as an Animal doth; but, my opinion is, that all Senſe is not bound up to the ſenſitive organs of an Animal, nor Reaſon to the kernel of a man's brain, or the orifice of the ſtomack, or the fourth ventricle of the brain, or onely to a mans body; for though we do not ſee all Creatures move in that manner as Man or Animals do, as to walk, run, leap, ride, *&c.* and perform exterior acts by various local motions; nevertheleſs, we cannot in reaſon ſay, they are void and deſtitute of all motion; For what man knows the variety of motions in Nature: Do not we ſee, that Nature is active in every thing, yea, the leaſt of her Creatures. For example; how ſome things do unanimouſly conſpire and agree, others antipathetically flee from each other; and how ſome do increaſe, others decreaſe; ſome diſſolve, ſome conſiſt, and how all things are ſubject to perpetual changes and alterations; and do you think all this is done without motion, life, ſenſe, and reaſon? I pray you conſider, *Madam*, that there are internal motions as well as external, alterative as well as conſtitutive; and ſeveral other ſorts of motions not perceptible by our ſenſes, and therefore it is impoſsible that all Creatures ſhould move after one ſort of motions. But you will ſay, Motion may be granted, but not Life, Senſe, and Reaſon. I

anſwer,

anſwer, I would fain know the reaſon why not; for I am confident that no man can in truth affirm the contrary: What is Life, but ſenſitive Motion? what is Reaſon, but rational motion? and do you think, *Madam*, that any thing can move it ſelf without life, ſenſe and reaſon? I, for my part, cannot imagine it ſhould; for it would neither know why, whither, nor what way, or how to move. But you may reply, Motion may be granted, but not ſelf-motion; and life, ſenſe, and reaſon, do conſiſt in ſelf-motion. I anſwer: this is impoſsible; for not any thing in Nature can move naturally without natural motion, and all natural motion is ſelf-motion. If you ſay it may be moved by another; My anſwer is, firſt, that if a thing has no motion in it ſelf, but is moved by another which has ſelf-motion, then it muſt give that immovable body motion of its own, or elſe it could not move, having no motion at all; for it muſt move by the power of motion, which is certain; and then it muſt move either by its own motion, or by a communicated or imparted motion; if by a communicated motion, then the ſelf-moveable thing or body muſt transfer its own motion into the immoveable, and loſe ſo much of its own motion as it gives away, which is impoſsible, as I have declared heretofore at large, unleſs it dõ alſo tranſfer its moving parts together with it, for motion cannot be transfered without ſubſtance. But experience and obſervation witneſſeth the contrary. Next, I ſay, if it were poſsible that one body did move another, then moſt part of natural Creatures, which are counted immoveable of themſelves, or inanimate, and deſtitute of ſelf-motion, muſt be moved by a forced or violent, and not by a natural motion; for all motion that proceeds from

from an external agent or moving power, is not natural, but forced, onely ſelf-motion is natural; and then one thing moving another in this manner, we muſt at laſt proceed to ſuch a thing which is not moved by another, but hath motion in it ſelf, and moves all others; and, perhaps, ſince man, and the reſt of animals have ſelf-motion, it might be ſaid, that the motions of all other inanimate Creatures, as they call them, doth proceed from them; but man being ſo proud, ambitious, and ſelf-conceited, would ſoon exclude all other animals, and adſcribe this power onely to himſelf, eſpecially ſince he thinks himſelf onely endued with Reaſon, and to have this prerogative above all the reſt, as to be the ſole rational Creature in the World. Thus you ſee, *Madam*, what confuſion, abſurdity, and conſtrained work will follow from the opinion of denying ſelf-motion, and ſo conſequently, life and ſenſe to natural Creatures. But I, having made too long a digreſsion, will return to your *Authors* diſcourſe: And as for that he ſays, *A dead Carcaſs burns by the proper action of the fire*, I anſwer, That if the diſſolving motions of the fire be too ſtrong for the conſiſtent motions of that body which fire works upon, then fire is the cauſe of its alteration; but if the conſiſtent motions of the body be too ſtrong for the diſſolving motions of the fire, then the fire can make no alteration in it. Again: he ſays, *Calx vive, as long as it remains dry, it gnaws not a dead Carcaſs; but it preſently gnaws live fleſh, and makes an eſcharre; and a dead carcaſs is by lime wholly reſolved into a liquor, and is combibed, except the bone and griſtle thereof; but it doth not conſume live fleſh into a liquor, but tranſlates it into an eſcharre.* I will ſay no

more to this, but that I have fully enough declared my opinion before, that the actions or motions of life alter in that which is named a dead Carcaſs, from what they were in that which is called a Living body; but although the actions of Life alter, yet life is not gone or annihilated; for life is life, and remains ſtill the ſame, but the actions or motions of life change and differ in every figure; and this is the cauſe that the actions of Fire, Time, and *Calx-vive*, have not the ſame effects in a dead Carcaſs, as in a living Body; for the difference of their figures, and their different motions, produce different effects in them; and this is the cauſe, that one and the ſame fire doth not burn or act upon all bodies alike: for ſome it diſſolves, and ſome not; and ſome it hardens, and ſome it conſumes; and ſome later, ſome ſooner: For put things of ſeveral natures into the ſame Fire, and you will ſee how they will burn, or how fire will act upon them after ſeveral manners; ſo that fire cannot alter the actions of ſeveral bodies to its own bias; and therefore, ſince a living and a dead Body (as they call them) are not the ſame, (for the actions or motions of life, by their change or alteration, have altered the nature or figure of the body) the effects cannot be the ſame; for a Carcaſs has neither the interior nor exterior motions of that figure which it was before it was a Carcaſs, and ſo the figure is quite alter'd from what it was, by the change and alteration of the motions. But to conclude, the motions of the exterior Agent, and the motions of the Patient, do ſometimes joyn and unite, as in one action, or to one effect, and ſometimes the motions of the Agent are onely an occaſion, but not a co-workman in the production of ſuch

ſuch or ſuch an effect, as the motions of the Patient do work; neither can the motions of the Agent work totally and meerly of themſelves, ſuch or ſuch effects, without the aſsiſtance or concurrence of the motions of the Patient, but the motions of the Patient can: and there is nothing that can prove more evidently that Matter moves it ſelf, and that exterior agents or bodies are onely an occaſion to ſuch or ſuch a motion in another body, then to ſee how ſeveral things put into one and the ſame fire, do alter after ſeveral modes; which ſhews, it is not the onely action of fire, but the interior motions of the body thrown into the fire, which do alter its exterior form or figure. And thus, I think I have ſaid enough to make my opinions clear, that they may be the better underſtood: which is the onely aim and deſire of,

MADAM,

Your humble and

faithful Servant.

XIX.

MADAM,

YOur *Author* is not a Natural, but a Divine Philoſopher, for in many places he undertakes to interpret the Scripture; wherein, to my judgment, he expreſſeth very ſtrange opinions; you will give me leave at this preſent to note ſome few. Firſt, in one

[a] *Ch.* The Poſition is demonſtrated.
[b] *Gen. 6. 2.*

one place, [a] interpreting that paſſage of Scripture, [b] where it is ſaid, That the *ſons of God took to wives the daughters of men*: He underſtands by the Sons of God, thoſe which came from the Poſterity of *Adam*, begotten of a Man and a Woman, having the true Image of God: But by the Daughters of Men, he underſtands Monſters; that is, thoſe which through the Devils mediation, were conceived in the womb of a Junior Witch or Sorcereſs: For when Satan could find no other ways to deprive all the race of Men of the Image of God, and extinguiſh the Immortal mind out of the ſtock of *Adams* Poſterity, he ſtirr'd up deteſtable copulations, from whence proceeded ſavage Monſters, as Faunes, Satyrs, Sylphs, Gnomes, Nymphs, Driades, Najades, Nereides, *&c.* which generated their off-ſprings amongſt themſelves, and their poſterities again contracted their copulations amongſt themſelves, and at length began Wedlocks with Men; and from this copulation of Monſters and Nymphs, they generated ſtrong Gyants. Which Interpretation, how it agrees with the Truth of Scripture, I will leave to Divines to judg: But, for my part, I cannot conceive, how, or by what means or ways, thoſe Monſters and Nymphs were produced or generated. Next, his opinion is, That *Adam* did raviſh *Eve*, and defloured her by force, calling him the firſt infringer of modeſty, and deflourer of a Virgin; and that therefore God let hair grow upon his chin, cheeks, and lips, that he might be a Compere, Companion, and like unto many four-footed Beaſts, and might bear before him the ſignature of the ſame; and that, as he was lecherous after their manner, he might alſo

ſhew

ſhew a rough countenance by his hairs: which whether it be ſo, or not, I cannot tell, neither do I think your *Author* can certainly know it himſelf; for the Scripture makes no mention of it: But this I dare ſay, that *Eves* Daughters prove rather the contrary, *viz.* that their Grandmother did freely conſent to their Grandfather. Alſo he ſays, That God had purpoſed to generate Man by the overſhadowing of the Holy Spirit, but Man perverted the Intent of God; for had *Adam* not ſinned, there had been no generation by the copulation of a Man and Woman, but all the off-ſprings had appear'd out of *Eve*, a Virgin, from the Holy Spirit, as conceived from God, and born of a woman, a virgin. To which, I anſwer, firſt, That it is impoſsible to know the Deſigns and ſecret Purpoſes of God: Next, to make the Holy Spirit the common Generator of all Man-kind, is more then the Scripture expreſſes, and any man ought to ſay: Laſtly, it is abſurd, in my opinion, to ſay, that frail and mortal Men, can pervert the intent and deſigns of the Great God; or that the Devil is able to prevent God's Intent, (as his expreſsion is in the ſame place.) But your *Author* ſhews a great affection to the Female Sex, when he ſays, that God doth love Women before Men, and that he has given them a free gift of devotion before men; when as others do lay all the fault upon the Woman, that ſhe did ſeduce the Man; however in expreſsing his affection for Women, your *Author* expreſſes a partiality in God. And, as for his opinion, that God creates more Daughters then Males, and that more Males are extinguiſhed by Diſeaſes, Travels, Wars, Duels, Shipwracks, and the like:

Truly, I am of the ſame mind, that more Men are kill'd by Travels, Wars, Duels, Shipwracks, *&c.* then Women; for Women never undergo theſe dangers, neither do ſo many kill themſelves with intemperate Drinking, as Men do; but yet I believe, that Death is as general, and not more favourable to Women, then he is to Men; for though Women be not ſlain *in* Wars like Men, (although many are, by the cruelty of Men, who not regarding the weakneſs of their ſex, do inhumanely kill them,) yet many do die *in* Child-bed, which is a Puniſhment onely concerning the Female ſex. But to go on in your *Authors* Interpretations: His knowledg of the Conception of the Bleſſed Virgin, reaches ſo far, as he doth not ſtick to deſcribe exactly, not onely how the bleſſed Virgin conceiv'd *in the* womb, but firſt in the heart, or the ſheath of the heart; and then how the conception removed from the heart, into the womb, and in what manner it was performed. Certainly, *Madam*, I am amazed, when I ſee men ſo conceited with their own perfections and abilities, (I may rather ſay, with their imperfections and weakneſſes) as to make themſelves God's privy Councellors, and his Companions, and partakers of all the ſacred Myſteries, Deſigns, and hidden ſecrets of the Incomprehenſible and Infinite God. O the vain Preſumption, Pride, and Ambition of wretched Men! There are many more ſuch expreſsions in your *Authors* works, which, in my opinion, do rather detract from the Greatneſs of the Omnipotent God, then manifeſt his Glory: As for example; That Man is the clothing of the Deity; and the ſheath of the Kingdom of God, and many the like: which do not belong to God: for God is beyond all expreſsion,

expreſsion, becauſe he is Infinite; and when we name God, we name an Unexpreſsible, and Incomprehenſible Being; and yet we think we honour God, when we expreſs him after the manner of corporeal Creatures. Surely, the nobleſt Creature that ever is in the World, is not able to be compared to the moſt Glorious God, but whatſoever compariſon is made, detracts from his Glory: And this, in my opinion, is the reaſon, that God forbad any likeneſs to be made of him, either in Heaven, or upon Earth, becauſe he exceeds all that we might compare or liken to him. And as men ought to have a care of ſuch ſimilizing expreſsions, ſo they ought to be careful in making Interpretations of the Scripture, and expreſsing more then the Scripture informs; for what is beyond the Scripture, is Man's own fancy; and to regulate the Word of God after Man's fancy, at leaſt to make his fancy equal with the Word of God, is Irreligious. Wherefore, men ought to ſubmit, and not to pretend to the knowledg of God's Counſels and Deſigns, above what he himſelf hath been pleaſed to reveal: as for example, to deſcribe of what Figure God is, and to comment and deſcant upon the Articles of Faith; as how Man was Created; and what he did in the ſtate of Innocence; how he did fall; and what he did after his fall: and ſo upon the reſt of the Articles of our Creed, more then the Scripture expreſſes, or is conformable to it. For if we do this, we ſhall make a Romance of the holy Scripture, with our Paraphraſtical Deſcriptions: which alas! is too common already. The truth is, Natural Philoſophers, ſhould onely contain themſelves within the ſphere of Nature, and not treſpaſs upon the Revelation of the Scripture,

but

but leave this Profeſsion to thoſe to whom it properly belongs. I am confident, a Phyſician, or any other man of a certain Profesion, would not take it well, if others, who are not profeſſed in that Art, ſhould take upon them to practiſe the ſame: And I do wonder, why every body is ſo forward to encroach upon the holy Profeſsion of Divines, which yet is a greater preſumption, then if they did it upon any other; for it contains not onely a moſt hidden and myſtical knowledg, as treating of the Higheſt Subject, which is the moſt Glorious, and Incomprehenſible God, and the ſalvation of our Souls; but it is alſo moſt dangerous, if not interpreted according to the Holy Spirit, but to the byaſs of man's fancy. Wherefore, *Madam*, I am afraid to meddle with Divinity in the leaſt thing, leſt I incur the hazard of offending the divine Truth, and ſpoil the excellent Art of Philoſophying; for a Philoſophical Liberty, and a Supernatural Faith, are two different things, and ſuffer no co-mixture; as I have declared ſufficiently heretofore. And this you will find as much truth, as that I am,

MADAM,

Your conſtant Friend,

and faithful Servant.

MA-

XX.

MADAM,

ALthough your *Author* [a] is of the opinion of *Plato*, in making *Three ſorts of Atheiſts: One that believes no Gods; Another, which indeed admits of Gods, yet ſuch as are uncarefull of us, and deſpiſers of ſmall matters, and therefore alſo ignorant of us: And laſtly, a third ſort, which although they believe the Gods to be expert in the leaſt matters, yet do ſuppoſe that they are flexible and indulgent toward the ſmalleſt cold Prayers or Petitions*: Yet I cannot approve of this diſtinction, for I do underſtand but one ſort of Atheiſts; that is, thoſe which believe no God at all; but thoſe which believe that there is a God, although they do not worſhip him truly, nor live piouſly and religiouſly as they ought, cannot, in truth, be called Atheiſts, or elſe there would be innumerous ſorts of Atheiſts; to wit, all thoſe, that are either no Chriſtians, or not of this or that opinion in Chriſtian Religion, beſides all them that live wickedly, impiouſly and irreligiouſly; for to know, and be convinced in his reaſon, that there is a God, and to worſhip him truly, according to his holy Precepts and Commands, are two ſeveral things: And as for the firſt, that is, for the Rational knowledg of the Exiſtence of God, I cannot be perſwaded to believe, there is any man which has ſenſe and reaſon, that doth not acknowledg a God; nay, I am ſure, there is no part of Nature which is void and deſtitute of this knowledg of

[a] *Ch.* Of the Image of the Mind.

the Exiſtence of an Infinite, Eternal, Immortal, and Incomprehenſible Deity; for every Creature, being indued with ſenſe and reaſon, and with ſenſitive and rational knowledg, there can no knowledg be more Univerſal then the knowledg of a God, as being the root of all knowledg: And as all Creatures have a natural knowledg of the Infinite God, ſo, it is probable, they Worſhip, Adore, and Praiſe his Infinite Power and Bounty, each after its own manner, and according to its nature; for I cannot believe, God ſhould make ſo many kinds of Creatures, and not be worſhipped and adored but onely by Man: Nature is God's Servant, and ſhe knows God better then any Particular Creature; but Nature is an Infinite Body, conſiſting of Infinite Parts, and if ſhe adores and worſhips God, her Infinite Parts, which are Natural Creatures, muſt of neceſsity do the like, each according to the knowledg it hath: but Man in this particular goes beyond others, as having not onely a natural, but alſo a revealed knowledg of the moſt Holy God; for he knows Gods Will, not onely by the light of Nature, but alſo by revelation, and ſo more then other Creatures do, whoſe knowledg of God is meerly Natural. But this Revealed Knowledg makes moſt men ſo preſumptuous, that they will not be content with it, but ſearch more and more into the hidden myſteries of the Incomprehenſible Deity, and pretend to know God as perfectly, almoſt, as themſelves; deſcribing his Nature and Eſſence, his Attributes, his Counſels, his Actions, according to the revelation of God, (as they pretend) when as it is according to their own Fancies. So proud and preſumptuous

tuous are many: But they ſhew thereby rather their weakneſſes and follies, then any truth; and all their ſtrict and narrow pryings into the ſecrets of God, are rather unprofitable, vain and impious, then that they ſhould benefit either themſelves, or their neighbour; for do all we can, God will not be perfectly known by any Creature: The truth is, it is a meer impoſsibility for a finite Creature, to have a perfect Idea of an Infinite Being, as God is; be his Reaſon never ſo acute or ſharp, yet he cannot penetrate what is Impenetrable, nor comprehend what is Incomprehenſible: Wherefore, in my opinion, the beſt way is humbly to adore what we cannot conceive, and believe as much as God has been pleaſed to reveal, without any further ſearch; leſt we diving too deep, be ſwallowed up in the bottomleſs depth of his Infiniteneſs: Which I wiſh every one may obſerve, for the benefit of his own ſelf, and of others, to ſpend his time in more profitable Studies, then vainly to ſeek for what cannot be found. And with this hearty wiſh I conclude, reſting,

MADAM,

Your faithful Friend

and Servant.

XXI.

MADAM,

YOur *Author* is ſo much for Spirits, that he doth not ſtick to affirm, [a] *That Bodies ſcarce make up a moity or half part of the world; but Spirits, even by themſelves, have or poſſeſs their moity, and indeed the whole world.* If he mean bodileſs and incorporeal Spirits, I cannot conceive how Spirits can take up any place, for place belongs onely to body, or a corporeal ſubſtance, and millions of immaterial Spirits, nay, were their number infinite, cannot poſſeſs ſo much place as a ſmall Pinspoint, for Incorporeal Spirits poſſeſs no place at all; which is the reaſon, that an Immaterial and a Material Infinite cannot hinder, oppoſe, or obſtruct each other; and ſuch an Infinite, Immaterial Spirit is God alone. But as for Created Immaterial Spirits, as they call them, it may be queſtioned whether they be Immaterial, or not; for there may be material Spirits as well as immaterial, that is, ſuch pure, ſubtil and agil ſubſtances as cannot be ſubject to any humane ſenſe, which may be purer and ſubtiller then the moſt refined air, or pureſt light; I call them material ſpirits, onely for diſtinctions ſake, although it is more proper, to call them material ſubſtances: But be it, that there are Immaterial Spirits, yet they are not natural, but ſupernatural; that is, not ſubſtantial parts of Nature; for Nature is material, or corporeal, and ſo are all her Creatures, and whatſoever is not material is no part of Nature,

[a] *Ch.* Of the Magnetick cure of wounds.

Nature, neither doth it belong any ways to Nature: Wherefore, all that is called Immaterial, is a Natural Nothing, and an Immaterial Natural ſubſtance, in my opinion, is *non*-ſenſe: And if you contend with me, that Created Spirits, as good and bad Angels, as alſo the Immortal Mind of Man, are Immaterial, then *I* ſay they are Supernatural; but if you ſay, they are Natural, then I anſwer they are Material: and thus I do not deny the exiſtence of Immaterial Spirits, but onely that they are not parts of Nature, but ſupernatural; for there may be many things above Nature, and ſo above a natural Underſtanding, and Knowledg, which may nevertheleſs have their being and exiſtence, although they be not Natural, that is, parts of Nature: Neither do I deny that thoſe ſupernatural Creatures may be amongſt natural Creatures, that is, have their ſubſiſtence amongſt them, and in Nature; but they are not ſo commixed with them, as the ſeveral parts of Matter are, that is, they do not joyn to the conſtitution of a material Creature; for no Immaterial can make a Material, or contribute any thing to the making or production of it; but ſuch a co-mixture would breed a meer confuſion in Nature: wherefore, it is quite another thing, to be in Nature, or to have its ſubſiſtence amongſt natural Creatures in a ſupernatural manner or way, and to be a part of Nature. I allow the firſt to Immaterial Spirits, but not the ſecond, *viz.* to be parts of Nature. But what Immaterial Spirits are, both in their Eſſence or Nature, and their Eſſential Properties, it being ſupernatural, and above natural Reaſon, I cannot determine any thing thereof. Neither dare I ſay, they are Spirits like as

God is, that is, of the ſame Eſſence or Nature, no more then I dare ſay or think that God is of a humane ſhape or figure, or that the Nature of God is as eaſie to be known as any notion elſe whatſoever, and that we may know as much of him as of any thing elſe in the world. For if this were ſo, man would know God as well as he knows himſelf; but God and his *Attributes* are not ſo eaſily known as man may know himſelf and his own natural Proprieties; for God and his Attributes are not conceiveable or comprehenſible by any humane underſtanding, which is not onely material, but alſo finite; for though the parts of Nature be infinite in number, yet each is finite in it ſelf, that is, in its figure, and therefore no natural Creature is capable to conceive what God *is*; for he being *infinite*, there is alſo required an infinite capacity to conceive him; Nay, Nature her ſelf, although ſhe is Infinite, yet cannot poſsibly have an exact notion of God, by reaſon ſhe is Material, and God is Immaterial; and if the Infinite ſervant of God is not able to conceive God, much leſs will a finite part of Nature do it. Beſides, the *holy* Church doth openly confeſs and declare the Incomprehenſibility of God, when in the *Athanaſian* Creed, ſhe expreſſes, that the Father is Incomprehenſible, the Son Incomprehenſible, and the Holy Ghoſt Incomprehenſible, and that there are not three, but one Incomprehenſible God: Therefore, if any one will prove the contrary, to wit, that God is Comprehenſible, or (which is all one) that God is as eaſie to be known as any Creature whatſoever, he ſurely is more then the Church: But I ſhall never ſay or believe ſo, but rather confeſs my ignorance, then betray my folly; and leave

things

things Divine to the Church; to which I ſubmit, as I ought, in all Duty: and as I do not meddle with any Divine Myſteries, but ſubject my ſelf, concerning my Faith or Belief, and the regulating of my actions for the obtaining of Eternal Life, wholly under the government and doctrine of the Church, ſo, I hope, they will alſo grant me leave to have my liberty concerning the contemplation of Nature and natural things, that I may diſcourſe of them, with ſuch freedom, as meer natural Philoſophers uſe, or at leaſt ought, to do; and thus I ſhall be both a good Chriſtian, and a good Natural Philoſopher: Unto which, to make the number perfect, I will add a third, which is, I ſhall be,

MADAM,

Your real and faithful

Friend and Servant.

XXII.

MADAM,

THough I am loth (as I have often told you) to imbarque my ſelf in the diſcourſe of ſuch a ſubject, as no body is able naturally to know, which is the ſupernatural and divine Soul in Man; yet your *Author* having, in my judgment, ſtrange opinions, both of the Eſſence, Figure, Seat and Production of the Soul, and diſcourſing thereof, with ſuch liberty and freedom, as of any other natural Creature, I cannot

chuſe

chuſe but take ſome notice of his diſcourſe, and make ſome reflections upon it; which yet, ſhall rather expreſs my ignorance of the ſame ſubject, then in a poſitive anſwer, declare my opinion thereof; for, in things divine, I refer my ſelf wholly to the Church, and ſubmit onely to their inſtructions, without any further ſearch of natural reaſon; and if I ſhould chance to expreſs more then I ought to do, and commit ſome errror, it being out of ignorance rather then ſet purpoſe, I ſhall be ready upon better information, to mend it, and willingly ſubject my ſelf under the cenſure and correction of the holy Church, as counting it no diſgrace to be ignorant in the myſteries of Faith, ſince Faith is of things unknown, but rather a duty required from every Layman to believe ſimply the Word of God, as it is explained and declared by the Orthodox Church, without making Interpretations out of his own brain, and according to his own fancy, which breeds but Schiſmes, Hereſies, Sects, and Confuſions. But concerning your *Author*, I perceive by him, firſt, that he makes no diſtinction between the Natural or Rational Soul or Mind of Man, and between the Divine or Supernatural Soul, but takes them both as one, and diſtinguiſhes onely the Immortal Soul from the ſenſitive Life of Man, which he calls the Frail, Mortal, Senſitive Soul. Next, all his knowledg of this Immortal Soul is grounded upon Dreams and Viſions, and therefore it is no wonder, if his opinions be ſomewhat ſtrange and irregular. *I ſaw, in a Viſion,* ſays he, [a] *my Mind in a humane ſhape; but there was a light, whoſe whole homogeneal body was actively ſeeing, a ſpiritual ſubſtance, Chryſtalline, ſhining with a proper ſplendor, or a ſplendor*

[a] *Ch.* Of the Image of the Mind.

of

of its own, but in another cloudy part it was rouled up as it were in the husk of it ſelf; which whether it had any ſplendor of it ſelf, I could not diſcern, by reaſon of the ſuperlative brightneſs of the Chryſtal Spirit contain'd within. Whereupon he defines *the Soul* to be *a Spirit, beloved of God, homogeneal, ſimple, immortal, created into the Image of God, one onely Being, whereto death adds nothing, or takes nothing from it, which may be natural or proper to it in the Eſſence of its ſimplicity.* As for this definition of the Soul, it may be true, for any thing I know: but when your *Author* makes the divine Soul to be a Light, I cannot conceive how that can agree; for Light is a Natural and Viſible Creature, and, in my opinion, a corporeal ſubſtance; whereas the Soul is immaterial and incorporeal: But be it, that Light is not a ſubſtance, but a neutral Creature, according to your *Author*; then, nevertheleſs the Immortal Soul cannot be ſaid to be a light, becauſe ſhe is a ſubſtance. He may ſay, [a] The Soul is an Incomprehenſible Light. But if the Soul be Incomprehenſible, how then doth he know that ſhe is a light, and not onely a light, but a glorious and ſplendorous light? You will ſay, By a Dream, or Viſion. Truly, *Madam*, to judg any thing by a Dream, is a ſign of a weak judgment. Nay, ſince your *Author* calls the ſoul conſtantly a light; if it were ſo, and that it were ſuch a ſplendorous, bright and ſhining light, as he ſays; then when the body dies, and the ſoul leaves its Manſion, it would certainly be ſeen, when it iſſues out of the body. But your *Author* calls the Soul a *Spiritual Subſtance*, and yet he ſays, ſhe has *an homogeneal body, actively ſeeing and ſhining with a proper ſplendor of her own*; which how it can agree, I

[a] Of the Spirit of life.

leave to you to judg; for I thought, an Immaterial ſpirit and a body were too oppoſite things, and now I ſee, your *Author* makes Material and Immaterial, Spiritual and Corporeal, all one. But this is not enough, but he allows it a Figure too, and that of a humane ſhape; for ſays he, *I could never conſider the Thinglineſs of the Immortal Mind with an Individual exiſtence, deprived of all figure, neither but that it at leaſt would anſwer to a humane ſhape*; but the Scripture, as much as is known to me, never doth expreſs any ſuch thing of the Immortal Soul, and I ſhould be loth to believe any more thereof then it declares. The Apoſtles, although they were converſant with Chriſt, and might have known it better, yet were never ſo inquiſitive into the nature of the Soul, as our Modern divine *Philoſophers are*; for our Saviour, and they, regarded more the ſalvation of Man's Soul, and gave holy and wiſe Inſtructions rather, how to live piouſly and conformably to God's Will, to gain eternal Life, then that they ſhould diſcourſe either of the Eſſence or Figure, or Proprieties of the Soul, and whether it was a light, or any thing elſe, and ſuch like needleſs queſtions, raiſed in after-times onely by the curioſity of divine Philoſophers, or Philoſophying Divines; For though Light is a glorious Creature, yet Darkneſs is as well a Creature as Light, and ought not therefore to be deſpiſed; for if it be not ſo bright, and ſhining as Light, yet it is a grave Matron-like Creature, and very uſeful: Neither is the Earth, which is inwardly dark, to be deſpiſed, becauſe the Sun is bright. The like may be ſaid of the ſoul, and of the body; for the body is very uſeful to the ſoul, how dark ſoever your *Author* believes it to be;

and

and if he had not ſeen light with his bodily eyes, he could never have conceived the Soul to be a Light: Wherefore your *Author* can have no more knowledg of the divine ſoul then other men have, although he has had more Dreams and Viſions; nay, he himſelf confeſſes, that the Soul is an Incomprehenſible Light; which if ſo, ſhe cannot be perfectly known, nor confined to any certain figure; for a figure or ſhape belongs onely to a corporeal ſubſtance, and not to an incorporeal: and ſo, God being an Incomprehenſible Being, is excluded from all figure, when as yet your *Author* doth not ſtick to affirm, that God is of a humane figure too, as well as the humane Soul is; *For*, ſays he, • *Since God hath been pleaſed to adopt the Mind alone into his own Image, it alſo ſeems to follow, that the vaſt and unutterable God is of a humane Figure, and that from an argument from the effect, if there be any force of arguments in this ſubject.* Oh! the audacious curioſity of Man! Is it not blaſphemy to make the Infinite God of a frail and humane ſhape, and to compare the moſt Holy to a ſinful Creature? Nay, is it not an abſurdity, to confine and incloſe that Incomprehenſible Being in a finite figure? I dare not inſiſt longer upon this diſcourſe, leſt I defile my thoughts with the entertaining of ſuch a ſubject that derogates from the glory of the Omnipotent Creator; Wherefore, I will haſten, as much as I can, to the ſeat of the Soul, which, after relating ſeveral opinions, your *Author* concludes to be the orifice of the ſtomack, where the Immortal Soul is involved and entertained in the radical Inn or Bride-bed of the ſenſitive Soul or vital Light; • which part of the body is ſurely more honoured then all the reſt: But I,

for

for my part, cannot conceive why the Soul ſhould not dwell in the parts of conception, as well, as in the parts of digeſtion, except it be to prove her a good Huſwife; however, your *Author* allows her to ſlide down ſometimes: For, *The action of the Mind*, ſays he, *being impriſoned in the Body, doth always tend downwards*; but whether the Soul tend more downwards then upwards, Contemplative Perſons, eſpecially Scholars, and grave States-men, do know beſt; certainly, I believe, they find the ſoul more in their heads then in their heels, at leaſt her operations. But, to conclude, if the Soul be pure and ſingle of her ſelf, ſhe cannot mix with the Body, becauſe ſhe needs no aſsiſtance; nor joyn with the Body, though ſhe lives in the Body, for ſhe needs no ſupport; and if ſhe be individable, ſhe cannot divide her ſelf into ſeveral Parts of the Body; but if the Soul ſpread over all the Body, then ſhe is bigger, or leſs, according as the Body is; and if ſhe be onely placed in ſome particular part, then onely that one part is indued with a Soul, and the reſt is Soul-leſs; and if ſhe move from place to place, then ſome parts of the Body will be ſometimes indued with a Soul, ſometimes not; and if any one part requires not the ſubſiſtence of the Soul within it, then perhaps all the Body might have been able to ſpare her; neither might the Soul, being able to ſubſiſt without the body, have had need of it. Thus uſeleſs queſtions will trouble men's brains, if they give their fancies leave to work. I ſhould add ſomething of the Production of the Soul; but being tyred with ſo tedious a diſcouſe of

your

your *Author*, I am not able to write any more, but repoſe my Pen, and in the mean while reſt affectionately,

MADAM,

Your faithful Friend

and Servant.

XXIII.

MADAM,

YOur *Authors* compariſon [a] of the Sun, with the immaterial or divine Soul in Man, makes me almoſt of opinion, that the Sun is the Soul of this World we inhabit, and that the fixed Stars, which are counted Suns by ſome, may be ſouls to ſome other worlds; for every one man has but one immaterial or divine ſoul, which is ſaid to be individable and ſimple in its eſſence, and therefore unchangeable; and if the Sun be like this immaterial ſoul, then the Moon may be like the material ſoul. But as for the Production of this immaterial and divine Soul in Man, whether it come by an immediate Creation from God, or be derived by a ſucceſsive propagation from Parents upon their Children, I cannot determine any thing, being ſupernatural, and not belonging to my ſtudy; nevertheleſs, the Propagation from Parents ſeems improbable to my reaſon; for I am not capable to imagine, how an immaterial ſoul, being individable, ſhould beget another.

[a] Of the ſeat of the Soul. *It.* Of the Image of the Mind.

ther. Some may ſay, by imprinting or ſealing, *viz.* that the ſoul doth print the Image of its own figure upon the ſpirit of the ſeed; which if ſo, then firſt there will onely be a production of the figure of the ſoul, but not of the ſubſtance, and ſo the Child will have but the Image of the ſoul, and not a real and ſubſtantial ſoul. Secondly, Every Child of the ſame Parents would be juſt alike, without any diſtinguiſhment; if not in body, yet in the Faculties and Proprieties of their Minds or Souls. Thirdly, There muſt be two prints of the two ſouls of both Parents upon one Creature, to wit, the Child; for both Parents do contribute alike to the Production of the Child, and then the Child would either have two ſouls, or both muſt be joyned as into one; which how it can be, I am not able to conceive. *Fourthly*, If the Parents print the Image of their ſouls upon the Child, then the Childs ſoul bears not the Image of God, but the Image of Man, to wit, his Parents. Laſtly, I cannot underſtand, how an immaterial ſubſtance ſhould make a print upon a corporeal ſubſtance, for Printing is a corporeal action, and belongs onely to bodies. Others may ſay, that the ſoul is from the Parents tranſmitted into the Child, like as a beam of Light; but then the ſouls of the Parents muſt part with ſome of their own ſubſtance; for light is a ſubſtance *dividable*, in my opinion; and if it were not, yet the ſoul is a ſubſtance, and cannot be communicated without loſing ſome of his own ſubſtance, but that is impoſsible; for the immaterial ſoul being individable, cannot be diminiſhed nor increaſed in its ſubſtance or Nature. Others again, will have the ſoul produced by certain Ideas; but Ideas being corporeal, cannot produce a ſubſtance Incorporeal

real or Spiritual. Wherefore I cannot conceive how the ſouls of the Parents, being individable in themſelves, and not removeable out of their bodies until the time of death, ſhould commix ſo, as to produce a third immaterial ſoul, like to their own. You will ſay, As the Sun, which is the fountain of heat and light, heats and enlightens, and produces other Creatures. But I anſwer, The Sun doth not produce other Suns, at leaſt not to our knowledg. 'Tis true, there are various and ſeveral manners and ways of Productions, but they are all natural, that is, material, or corporeal; to wit, Productions of ſome material beings, or corporeal ſubſtances; but the immaterial ſoul not being in the number of theſe, it is not probable, that ſhe is produced by the way of corporeal productions, but created and infuſed from God, according to her nature, which is ſupernatural and divine: But being the Image of God, how ſhe can be defiled with the impurity of ſin, and ſuffer eternal damnation for her wickedneſs, without any prejudice to her Creator, I leave to the Church to inform us thereof. Onely one Queſtion I will add, Whether the Soul be ſubject to Sickneſs and Pain? To which I anſwer: As for the ſupernatural and divine Soul, although ſhe be a ſubſtance, yet being not corporeal, but ſpiritual, ſhe can never ſuffer pain, ſickneſs, nor death; but as for the natural ſoul, to ſpeak properly, there is no ſuch thing in Nature as pain, ſickneſs, or death; unleſs in reſpect to ſome Particular Creatures compoſed of natural Matter; for what Man calls Sickneſs, Pain, and Death, are nothing elſe but the Motions of Nature; for though there is but one onely Matter, that is, nothing but meer Matter in

Nature,

Nature, without any co-mixture of either a ſpiritual ſubſtance, or any thing elſe that is not Matter; yet this meer Matter is of ſeveral degrees and parts, and is the body of Nature; Beſides, as there is but one onely Matter, ſo there is alſo but one onely Motion in Nature, as I may call it, that is, meer corporeal Motion, without any reſt or ceſſation, which is the ſoul of that Natural body, both being infinite; but yet this onely corporeal Motion is infinitely various in its degrees or manners, and ways of moving; for it is nothing elſe but the action of natural Matter, which action muſt needs be infinite, being the action of an infinite body, making infinite figures and parts. Theſe motions and actions of Nature, ſince they are ſo infinitely various, when men chance to obſerve ſome of their variety, they call them by ſome proper name, to make a diſtinguiſhment, eſpecially thoſe motions which belong to the figure of their own kind; and therefore when they will expreſs the motions of diſſolution of their own figure, they call them Death; when they will expreſs the motions of Production of their figure, they call them Conception and Generation; when they will expreſs the motions proper for the Conſiſtence, Continuance and Perfection of their Figure, they call them Health; but when they will expreſs the motions contrary to theſe, they call them Sickneſs, Pain, Death, and the like: and hence comes alſo the difference between regular and irregular motions; for all thoſe Motions that belong to the particular nature and conſiſtence of any figure, they call regular, and thoſe which are contrary to them, they call irregular. And thus you ſee, *Madam*; that there is no ſuch thing in Nature, as Death, Sickneſs, Pain, Health,

Health, *&c.* but onely a variety and change of the corporeal motions, and that thoſe words expreſs nothing elſe but the variety of motions in Nature; for men are apt to make more diſtinctions then Nature doth: Nature knows of nothing elſe but of corporeal *figurative* Motions, when as men make a thouſand diſtinctions of one thing, and confound and entangle themſelves ſo, with Beings, Non-beings, and Neutral-beings, Corporeals and Incorporeals, Subſtances and Accidents, or manners and modes of Subſtances, new Creations, and Annihilations, and the like, as neither they themſelves, nor any body elſe, is able to make any ſenſe thereof; for they are like the tricks and ſlights of Juglers, 'tis here, 'tis gone; and amongſt thoſe *Authors* which I have read as yet, the moſt difficult to be underſtood is this *Author* which I am now peruſing, who runs ſuch diviſions, and cuts Nature into ſo ſmall Parts, as the ſight of my Reaſon is not ſharp enough to diſcern them. Wherefore I will leave them to thoſe that are more quick-ſighted then I, and reſt,

MADAM,

Your conſtant Friend,

and faithful Servant.

XXIV.

MADAM,

Ch. Of the Image of the Soul.

YOur *Author* relates, how by ſome the *Immortal Soul is divided into two diſtinct parts; the Inferior or more outward, which by a peculiar name is called the Soul, and the other the Superior, the more inward, the which is called the bottom of the Soul or Spirit, in which Part the Image of God is ſpecially contained; unto which is no acceſs for the Devil, becauſe there is the Kingdom of God:* and each part has diſtinct Acts, Proprieties, and Faculties. Truly, *Madam*, I wonder, how ſome men dare diſcourſe ſo boldly of the Soul, without any ground either of Scripture or Reaſon, nay, with ſuch contradiction to themſelves, or their own opinions; For how can that be ſevered into parts, which in its nature is Individable? and how can the Image of God concern but one Part of the Soul, and not the other? Certainly, if the Soul is the Image of God, it is his Image wholly, and not partially, or in parts. But your *Author* has other as ſtrange and odd opinions as theſe, ſome whereof I have mentioned in my former Letters, *viz.* the Souls being a Light, her Figure, her Reſidence, and many the like: Amongſt the reſt, there

Ch. Of the Magnetick cure of Wounds.

is one thing which your *Author* frequently makes mention of; I know not what to call it, whether a thing, or a being, or no-thing; for it is neither of them; not a ſubſtance, nor an accident; neither a body, nor a ſpirit; and this Monſter (for I think this is its proper name,

name, ſince none other will fit it) is the Lacquey of the Soul, to run upon all errands; for the Soul ſitting in her Princely Throne or Reſidence, which is the orifice of the ſtomack, cannot be every where her ſelf; neither is it fit ſhe ſhould, as being a diſgrace to her, to perform all offices her ſelf for want of ſervants; therefore ſhe ſends out this moſt faithful and truſty officer, (your *Author* calls him *Ideal Entity*) who being prepared for his journey, readily performs all her commands, as being not tied up to no commands of places, times or dimenſions, eſpecially in Women with Child he operates moſt powerfully; for ſometime he printed a Cherry on a Child, by a ſtrong Idea of the Mother; but this Ideal Entity or ſervant of the Soul *hath troubled my brain more, then* his Miſtreſs the Soul her ſelf; for I could not, nor cannot as yet conceive, how he might be able to be the Jack of all offices, and do Journies and travel from one part of the body to another, being no body nor ſubſtance himſelf nor tyed to any place, time, and dimenſion, and therefore I will leave him. Your *Author* alſo ſpeaks much of the Inward and Outward Man; but ſince that belongs to Divinity, I will declare nothing of it; onely this I ſay, that, in my opinion, the Inward and Outward man do not make a double Creature, neither properly, nor improperly; properly, as to make two different men; improperly, as we uſe to call that man double, whoſe heart doth not agree with his words. But by the Outward man I underſtand the ſinful actions of fleſh and blood, and by the Inward man the reformed actions of the Spirit, according to the Word of God: and therefore the Outward and Inward man

make

make but one Man. Concerning the Natural Soul, your *Author* [a] ſpeaks of her more to her diſgrace then to her honor; for he ſcorns to call her a ſubſtance, neither doth he call her the Rational Soul, but he calls her the Senſitive Soul, and makes the Divine Soul to be the Rational Natural Soul, and the cauſe of all natural actions; for he being a Divine Philoſopher, mixes Divine and Natural things together: But of the Frail, Mortal, Senſitive Soul, as he names her, which is onely the ſenſitive Life, *his* opinions are, that ſhe is neither a ſubſtance, nor an accident, but a Neutral Creature, and a Vital Light, which hath not its like in the whole World, but the light of a Candle; for it is extinguiſhed, and goes out *like the flame of a Candle*; it is locally preſent, and entertained *in a* place, and yet not comprehended in a place. Nevertheleſs, although this ſenſitive ſoul is no ſubſtance, yet it has the honor to be the Inn or Lodging-place of the Immortal Soul or Mind; and theſe two ſouls being both lights, do pierce each other; but the Mortal ſoul blunts the Immortal ſoul with its cogitation of the corruption of *Adam*. Theſe opinions, *Madam*, I confeſs really, I do not know what to make of them; for I cannot imagine, how this Mortal ſoul, being no ſubſtance, can contain the Immortal ſoul, which is a ſubſtance; nor how they can pierce each other, and the Mortal ſoul being ſubſtanceleſs, get the better over an Immortal ſubſtance, and vitiate, corrupt, and infect it; neither can I conceive, how that, which in a manner is nothing already, can be made leſs and annihilated. Wherefore, my opinion is, that the Natural Soul, Life, aud Body, are all ſubſtantial

[a] Of the ſeat of the Soul.

parts

parts of Infinite Nature, not ſubſiſting by themſelves each apart, but inſeparably united and co-mixed both in their actions and ſubſtances; for not any thing can and doth ſubſiſt of it ſelf in Nature, but God alone; and things ſupernatural may, for ought I know: 'Tis true, there are ſeveral Degrees, ſeveral particular Natures, ſeveral Actions or Motions, and ſeveral Parts in Nature, but none ſubſiſts ſingle, and by it ſelf, without reference to the whole, and to one another. Your *Author* ſays, the Vital Spirit ſits in the Throne of the Outward man as Vice Roy of the Soul, and acts by Commiſsion of the Soul; but it is impoſsible, that one ſingle part ſhould be King of the whole Creature, ſince Rational and Senſitive Matter is divided into ſo many parts, which have equal power and force of action in their turns and ſeverall imployments; for though Nature is a Monarcheſs over all her Creatures, yet in every particular Creature is a Republick, and not a Monarchy; for no part of any Creature has a ſole ſupreme Power over the reſt. Moreover, your *Author* [a] ſays, That an *Angel is not a Light himſelf, nor has an Internal Light, natural and proper to himſelf, but is the Glaſs of an Uncreated Light*: Which, to my apprehenſion, ſeems to affirm, That Angels are the Looking-glaſſes of God; a pretty Poetical Fancy, but not grounded on the Scripture: for the Scripture doth not expreſs any ſuch thing of them, but onely that they are *Miniſtring Spirits ſent forth to miniſter for them who ſhall be heirs of Salvation*: Which, I think, is enough for us to know here, and leave the reſt until we come to enjoy their company in

[a] *Ch.* Of the Image of the Mind.

Heb. 11. 14.

Heaven. But it is not to be admired, that thoſe, which pretend to know the Nature and Secrets of God, ſhould not have likewiſe knowledg of Supernatural Creatures; In which conceit I leave them, and reſt,

MADAM,

Your real and faithful

Friend and Servant.

XXV.

MADAM,

REaſon and Intellect are two different things to your *Author*[a]; for *Intellect*, ſays he, *doth properly belong to the Immortal Soul, as being a Formal Light, and the very ſubſtance of the Soul it ſelf, wherein the Image of God onely conſiſts; But Reaſon is an uncertain, frail faculty of the Mortal Soul, and doth in no ways belong, nor has any communion with the Intellect of the Mind.* Which ſeems to me, as if your *Author* did make ſome difference between the Divine, and the Natural Soul in Man, although he doth not plainly declare it in the ſame Terms; for that which I name the Divine Soul, is to him the Immortal Mind, Intellect, or Underſtanding, and the Seat of the Image of God; but the Natural Soul he calls the Frail, Mortal, and Rational Soul; and as Underſtanding is the Eſſence of the Immortal, ſo Reaſon is to him the Eſſence of the Mortal Soul, which Reaſon he attributes not only

to

[a] *Ch.* The hunting or ſearching out of Sciences. *It.* Of the Image of the Mind.

to Man, but alſo to Brutes: For *Reaſon and Diſcourſe*, ſays he, *do not obſcurely flouriſh and grow in brute Beaſts, for an aged Fox is more crafty then a younger one by rational diſcourſe*; and again, *That the Rational Part of the Soul doth belong to brutes, is without doubt*: Wherein he rightly diſſents from thoſe, which onely do attribute a ſenſitive Soul to brutes; and Reaſon to none but Man, whom therefore they call a Rational Creature, and by this Rational Faculty do diſtinguiſh him from the reſt of Animals. And thus I perceive the difference betwixt your *Authors* opinion, and theirs, is, That other Philoſophers commonly do make the Rational ſoul, to be partly that which I call the ſupernatural and divine Soul, as onely belonging to man, and bearing the Image of God, not acknowledging any other Natural, but a Senſitive ſoul in the reſt of Animals, and a Vegetative ſoul in Vegetables; and theſe three ſouls, or faculties, operations, or degrees, (call them what you will, for we ſhall not fall out about names,) concurr and joyn together in Man; but the reſt of all Creatures, are void and deſtitute of Life, as well as of Soul, and therefore called Unanimate; and thus they make the natural rational ſoul, and the divine ſoul in man to be all one thing, without any diſtinguiſhment; but your *Author* makes a difference between the Mortal and Immortal ſoul in Man; the Immortal he calls the Intellect or Underſtanding, and the Mortal ſoul he calls Reaſon: but to my judgment he alſo attributes to the immortal ſoul, actions which are both natural, and ſupernatural, adſcribing that to the divine ſoul, which onely belongs to the natural, and taking that from the natural, which properly belongs to her. Beſides, he ſlights and

deſpiſes

deſpiſes the Rational ſoul ſo, as if ſhe were almoſt of no value with Man, making her no ſubſtance, but a mental intricate and obſcure Being, and ſo far from Truth, as if there were no affinity betwixt Truth and Reaſon, but that they diſagree in their very roots, and that the moſt refined Reaſon may be deceitful. But your *Author*, by his leave, confounds Reaſon, and Reaſoning, which are two ſeveral and diſtinct things; for reaſoning and arguing differs as much from Reaſon, as doubtfulneſs from certainty of knowledg, or a wavering mind from a conſtant mind; for Reaſoning is the diſcourſive, and Reaſon the underſtanding part in Man, and therefore I can find no great difference between Underſtanding and Reaſon: Neither can I be perſwaded, that Reaſon ſhould not remain with Man after *this life*, and enter with him into Heaven, although your *Author* ſpeaks much againſt it; for if Man ſhall be the ſame then, which he is now, in body, why not in ſoul alſo? 'Tis true, the Scripture ſays, he ſhall have a more glorious body, but it doth not ſay, that ſome parts of the body ſhall be caſt away, or remain behind; and if not of the body, why of the ſoul? Why ſhall Reaſon, which is the chief part of the natural Soul, be wanting? Your *Author* is much for Intellect or Underſtanding; but I cannot imagine how Underſtanding can be without Reaſon. Certainly, when he ſaw the Immortal Soul in a Viſion, to be a formal Light, how could he diſcern what he ſaw, without Reaſon? How could he diſtinguiſh between Light and Darkneſs, without Reaſon? How could he know the Image of the Mind to be the Image of God, without the diſtinguiſhment of Reaſon? You will ſay, Truth informed him,

and

and not Reaſon. I anſwer, Reaſon ſhews the Truth. You may reply, Truth requires no diſtinguiſhment or judgment. I grant, that perfect Truth requires not reaſoning or arguing, as whether it be ſo, or not; but yet it requires reaſon, as to confirm it to be ſo, or not ſo: for Reaſon is the confirmation of Truth, and Reaſoning is but the Inquiſition into Truth: Wherefore, when our Souls ſhall be in the fulneſs of bleſſedneſs, certainly, they ſhall not be ſo dull and ſtupid, but obſerve diſtinctions between God, Angels, and ſanctified Souls; as alſo, that our glory is above our merit, and that there is great difference between the Damned, and the Bleſſed, and that God is an Eternal and Infinite Being, and onely to be adored, admired, and loved, and that we enjoy as much as can be enjoyed: All which the Soul cannot know without the diſtinguiſhment of Reaſon; otherwiſe we might ſay, the Souls in Heaven, love, joy, admire and adore, but know not what, why, or wherefore; For, ſhall the bleſſed Souls preſent continual Praiſes without reaſon? Have they not reaſon to praiſe God for their happineſs, and ſhall they not remember the Mercies of God, and the Merits of his Son? For without remembrance of them, they cannot give a true acknowledgment, although your *Author* ſays there is no uſe of Memory or remembrance in Heaven: but ſurely, I believe there is; for if there were not memory in Heaven, the Penitent Thief upon the Croſs his Prayers had been in vain; for he deſired our Saviour to remember him when he did come into his Kingdom: Wherefore if there be Underſtanding in Heaven, there is alſo Reaſon; and if there be Reaſon, there is Memory alſo: for all Souls in Heaven, as

well as on Earth, have reaſon to adore, love, and praiſe God. But, *Madam*, my ſtudy is in natural Philoſophy, not in Theology; and therefore I'le refer you to Divines, and leave your *Author* to his own fancy, who by his ſingular Viſions tells us more news of our Souls, then our Saviour did after his Death and Reſurrection: Reſting in the mean time,

MADAM,

Your faithful Friend

and Servant.

XXVI.

MADAM,

CONcerning thoſe parts and chapters of your *Authors* Works, which treat of Phyſick; before I begin to examine them, I beg leave of you in this preſent, to make ſome reflections firſt upon his Opinions concerning the Nature of Health and Diſeaſes: As for *Health*, he is pleaſed to ſay, [a] That *it conſiſts not in a juſt Temperature of the body, but in a ſound and intire Life; for otherwiſe, a Temperature of body is as yet in a dead Carcaſs newly kill'd, where notwithſtanding there is now death, but not life, not health*: Alſo he ſays, [b] *That no diſeaſe is in a dead Carcaſs.* To which I anſwer, That, in my opinion, Life is in a dead Carcaſs, as well as in a living Animal, although not ſuch a Life as that Creature had before it became a Carcaſs, and the Tem-

[a] *Ch.* Call'd the Authors anſwers.

[b] *Ch.* Of the ſubject of inhering of diſeaſes.

Temperature of that Creature is altered with the alteration of its particular life; for the temperature of that particular life, which was before in the Animal, doth not remain in the Carcaſs, in ſuch a manner as it was when it had the life of ſuch or ſuch an Animal; nevertheleſs, a dead Carcaſs hath life, and ſuch a temperature of life, as is proper, and belonging to its own figure: for there are as many different lives, as there be different creatures, and each creature has its particular life and ſoul, as partaking of ſenſitive and rational Matter. And if a dead Carcaſs hath life, and ſuch a temperature of motions as belong to its own life, then there is no queſtion, but theſe motions may move ſometimes irregularly in a dead Carcaſs as well, as in any other Creature; and ſince health and diſeaſes are nothing elſe but the regularity or irregularity of ſenſitive corporeal Motions, a dead Carcaſs having Irregular motions, may be ſaid as well to have diſeaſes, as a living body, as they name it, although it is no proper or uſual term for other Creatures, but onely for Animals. However, if there were no ſuch thing as a diſeaſe (or term it what you will, I will call it Irregularity of ſenſitive motions) in a dead Carcaſs, How comes it that the infection of a diſeaſe proceeds often from dead Carcaſſes into living Animals? For, certainly, it is not meerly the odour or ſtink of a dead body, for then all ſtinking Carcaſſes would produce an Infection; wherefore this Infection muſt neceſſarily be inherent in the Carcaſs, and proceed from the Irregularity of its motions. Next I'le ask you, Whether a Conſumption be a diſeaſe, or not? If it be, then a dead Carcaſs might be ſaid to have a diſeaſe, as well as a living body; and the Ægyptians knew

knew a ſoveraign remedy againſt this diſeaſe, which would keep a dead Carcaſs intire and undiſſolved many ages; but as I ſaid above, a dead Carcaſs is not that which it was being a living Animal, wherefore their effects cannot be the ſame, having not the ſame cauſes. Next, your *Author* is pleaſed to call, with *Hippocrates*, *Nature the onely Phyſicianeſs of Diſeaſes.* I affirm it; and ſay moreover, that as ſhe is the onely Phyſicianeſs, ſo ſhe is alſo the onely Deſtroyereſs and Murthereſs of all particular Creatures, and their particular lives; for ſhe diſſolves and transforms as well as ſhe frames and creates; and acts according to her pleaſure, either for the increaſe or decreaſe, augmentation or deſtruction, ſickneſs or health, life or death of Particular Creatures. But concerning *Diſeaſes*, your *Authors* opinion is, That *a Diſeaſe is as Natural as Health.* I anſwer; 'tis true, Diſeaſes are natural; but if we could find out the art of healing, as well as the art of killing and deſtroying; and the art of uniting and compoſing, as well as the art of ſeparating and dividing; it would be very beneficial to man; but this may eaſier be wiſhed for, then obtained; for Nature being a corporeal ſubſtance, has infinite parts, as well as an infinite body; and Art, which is onely the playing action of Nature, and a particular Creature, can eaſier divide and ſeparate parts, then unite and make parts; for Art cannot match, unite, and joyn parts ſo as Nature doth; for Nature is not onely dividable and compoſeable, being a corporeal ſubſtance, but ſhe is alſo full of curioſity and variety, being partly ſelf-moving: and there is great difference between forced actions, and natural actions; for the one ſort is regular

regular, the other irregular. But you may ſay, Irregularities are as natural as Regularities. I grant it; but Nature leaves the irregular part moſt commonly to her daughter or creature Art, that is, ſhe makes irregularities for varieties ſake, but ſhe her ſelf orders the regular part, that is, ſhe is more careful of her regular *actions*; and thus Nature taking delight in variety ſuffers irregularities; for otherwiſe, if there were onely regularities, there could not be ſo much variety. Again your *Author* ſays, That *a diſeaſe doth not conſiſt but in living bodies*. I anſwer, there is not any body that has not life; for if life is general, then all figures or parts have life; but though all bodies have life, yet all bodies have not diſeaſes; for diſeaſes are but accidental to bodies, and are nothing elſe but irregular motions in particular Creatures, which may be not onely in Animals, but generally in all Creatures; for there may be Irregularities in all ſorts of Creatures, which may cauſe untimely diſſolutions; but yet all diſſolutions are not made by irregular motions, for many creatures diſſolve regularly, but onely thoſe which are untimely. In the ſame place your *Author* mentions, That *a Diſeaſe conſiſts immediately in Life it ſelf, but not in the dregs and filthineſſes, which are erroneous forreigners and ſtrangers to the life*. I grant, that a Diſeaſe is made by the motions of Life, but not ſuch a life as your *Author* deſcribes, which doth go out like the ſnuff of a Candle, or as one of *Lucian's* Poetical Lights; but by the life of Nature, which cannot go out without the deſtruction of Infinite Nature: and as the Motions of Nature's life make diſeaſes or irregularities, ſo they make that which man names dregs and filths; which dregs, filths, ſickneſs, and

Ch. The ſubject of inhering of diſeaſes is in the point of life.

It. Ch. Of the knowledg of diſeaſes.

death, are nothing but changes of corporeal motions, different from thoſe motions or actions that are proper to the health, perfection and conſiſtence of ſuch or ſuch a figure or creature. But, to conclude, there is no ſuch thing as corruption, ſickneſs, or death, properly in Nature, for they are made by natural actions, and are onely varieties in Nature, but not obſtructions or deſtructions of Nature, or annihilations of particular Creatures; and ſo is that we name Superfluities, which bear onely a relation to a particular Creature, which hath more Motion and Matter then is proper for the nature of its figure. And thus much of this ſubject for the preſent, from,

MADAM,

Your faithful Friend

and humble Servant.

XXVII.

MADAM,

IN my laſt, I remember, I told you of your *Authors* opinion concerning the ſeat of Diſeaſes, *viz.* that Diſeaſes are properly in living bodies, and conſiſt in the life it ſelf; but when I conſider his definition of Life, and of a Diſeaſe, I cannot conceive how they ſhould conſiſt together; for he deſcribes [a] *a Diſeaſe to be a real, material and ſubſtantial being, truly ſubſiſting in a body; but life to be a meer nothing, and yet*

[a] *Ch.* Of the knowledg of diſeaſes.

yet the immediate manſion of a diſeaſe, the inward ſubject, yea, and workman of the ſame; and that with the life all diſeaſes depart into nothing. Surely, *Madam*, it exceedeth my underſtanding; for, firſt, I cannot conceive how life, which is a meer Nothing, can be a lodging to ſomething? Next, how Nothing can depart and die? and thirdly how Something can become Nothing? I think your *Author* might call a dead Carcaſs as well No-thing, as Life; and ſince he names Diſeaſes the Thieves of Life, they muſt needs be but poor Thieves, becauſe they ſteal No-thing. But your *Author* compares Life to Light, and calls it an Extinguiſhable Light, like the light of a Candle; which if ſo, then the old ſaying is verified, That life goes out like the ſnuff of a Candle. But I wonder, *Madam*, that grave and wiſe men will ſeriouſly make uſe of a ſimiliſing old Proverb, or of a Poetical Fancy, in matter of natural Philoſophy; for I have obſerved, that *Homer, Lucian, Ovid, Virgil, Horace, &c.* have been very ſerviceable to great Philoſophers, who have taken the ground of their Fictions, and transferred them into Natural Philoſophy, as Immaterial ſubſtances, Non-beings, and many the like; but they can neither do any good nor hurt to Nature, but onely ſpoil Philoſophical Knowledg; and as Nature is ignorant of Immaterials and Non-beings, ſo Art is ignorant of Nature; for Mathematical Rules, Meaſures, and Demonſtrations, cannot rule, meaſure nor demonſtrate Nature, no more, then Chymical Diviſions, Diſſolutions and Extractions (or rather diſtractions, nay, I may ſay deſtructions) can divide, diſſolve, extract, compoſe, and unite, as Nature doth; Wherefore their Inſtruments,

Figures,

Figures, Furnaces, Limbecks, and Engines, cannot inſtruct them of the truth of Natures Principles; but the beſt and readieſt way to find out Nature, or rather ſome truth of Nature, is ſenſe and reaſon, which are Parts of Natures active ſubſtance, and therefore the trueſt informers of Nature; but the Ignorance of Nature has cauſed Ignorance amongſt Philoſophers, and the Ignorance of Philoſophers hath cauſed numerous Opinions, and numerous Opinions have cauſed various Diſcourſes and Diſputes; which Diſcourſes and Diſputes, are not Senſe and Reaſon, but proceed from Irregular Motions; and Truth is not found in Irregularities. But to return to Life: it ſeems your *Author* hath taken his opinion from *Lucian's* Kingdom of Lights, the Lights being the Inhabitants thereof; and when any was adjudged to die, his Light was put out, which was his puniſhment: And thus this Heatheniſh Fiction is become a Chriſtian Verity; when as yet your *Author* rayls much at thoſe, that inſiſt upon the Opinions and Doctrine of Pagan Philoſophers. Wherefore I will leave this Poetical Fancy of Life, and turn to Death, and ſee what opinion your *Author* hath of that. Firſt, concerning the cauſe or original of Death; *Neither God*, ſays he[a], *nor the Evil Spirit, is the Creator of Death, but Man. onely, who made death for himſelf; Neither did Nature make death, but Man made death natural.* Which if it be ſo, then Death being, to my opinion, a natural Creature, as well as Life, Sickneſs, and Health; Man, certainly, had great Power, as to be the Creator of a natural Creature. But, I would fain know the reaſon, why your *Author* is ſo unwilling to make God the Author of Death, and Sickneſs, as well

[a] *Ch.* Called the Poſition.

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as of Damnation? Doth it imply any Impiety or Irreligiouſneſs? Doth not God puniſh, as well as reward? and is not death a puniſhment for our ſin? You may ſay, Death came from ſin, but ſin did not come from God. Then ſome might ask from whence came ſin? You will ſay, From the Tranſgreſsion of the Command of God, as the eating of the Forbidden Fruit. But from whence came this Tranſgreſsion? It might be anſwer'd, From the Perſwaſion of the Serpent. From whence came this Perſwaſion? From his *ill* and malitious nature to oppoſe God, and ruine the race of Mankind. From whence came this *ill* Nature? From his Fall. Whence came his Fall? From his Pride and Ambition to be equal with God. From whence came this Pride? From his Free-will. From whence came his Free-will? From God. Thus, *Madam*, if we ſhould be too inquiſitive into the actions of God, we ſhould commit Blaſphemy, and make God Cruel, as to be the Cauſe of Sin, and conſequently of Damnation. But although God is not the Author of Sin, yet we may not ſtick to ſay, that he is the Author of the Puniſhment of Sin, as an Act of his Divine Juſtice; which Puniſhment, is Sickneſs, and Death; nay, I ſee no reaſon, why not of Damnation too, as it is a due puniſhment for the ſins of the wicked; for though Man effectively works his own puniſhment, yet Gods Juſtice inflicts it: Like as a juſt Judg may be call'd the cauſe of a Thief being hang'd. But theſe queſtions are too curious; and ſome men will be as preſumptuous as the Devil, to enquire into Gods ſecret actions, although they be ſure that they cannot be known by any Creature. Wherefore let us baniſh ſuch vain thoughts, and onely

admire, adore, love, and praiſe God, and implore his Mercy, to give us grace to ſhun the puniſhments for our ſins by the righteouſneſs of our actions, and not endeavour to know his ſecret deſigns. Next, I diſſent from your *Author*[a], That *Death and all dead things do want roots whereby they may produce*: For death, and dead things, in my opinion, are the moſt active producers, at leaſt they produce more numerouſly and variouſly then thoſe we name living things; for example, a dead Horſe will produce more ſeveral Animals, beſides other Creatures, then a living Horſe can do; but what *Archeus* and *Ideas* a dead Carcaſs hath, I can tell no more, then what *Blas* or *Gas* it hath; onely this I ſay, that it has animate Matter, which is the onely *Archeus* or Maſter-workman, that produces all things, creates all things, diſſolves all things, and tranſforms all things in Nature; but not out of Nothing, or into Nothing, as to create new Creatures which were not before in Nature, or to annihilate Creatures, and to reduce them to nothing; but it creates and transforms out of, and in the ſame Matter which has been from all Eternity. Laſtly, your *Author* is pleaſed to ſay, That *he doth not behold a diſeaſe as an abſtracted Quality; and that Apoplexy, Leproſie, Dropſie, and Madneſs, as they are Qualities in the abſtract, are not diſeaſes.* I am of his mind, that a diſeaſe is a real and corporeal being, and do not underſtand what he and others mean by abſtracted qualities; for Nature knows of no abſtraction of qualities from ſubſtances, and I doubt Man can do no more then Nature doth: Beſides, thoſe abſtractions are needleſs, and to no purpoſe; for no Immaterial quality will do any hurt, if it be no ſubſtance; wherefore

[a] *Ch.* Of the knowledg of diſeaſes.

wherefore Apoplexy, Leproſie, Dropſie, and Madneſs, are Corporeal beings, as well as the reſt of Diſeaſes, and not abſtracted Qualities; and I am ſure, Perſons that are affected with thoſe diſeaſes will tell the ſame. Wherefore leaving needleſs abſtractions to fancies abſtracted from right ſenſe and reaſon, I reſt,

MADAM,

Your faithful Friend

and Servant.

XXVIII.

MADAM,

I Am very much troubled to ſee your *Authors* Works fill'd with ſo many ſpiteful reproaches and bitter taunts againſt the Schools of Phyſicians, condemning both their Theory and Practice; nay, that not onely the Modern Schools of Phyſicians, but alſo the two ancient and famous Phyſicians, *Galen*, and *Paracelſus*, muſt ſufficiently ſuffer by him; eſpecially *Galen*; for there is hardly a Chapter in all his Works, which has not ſome accuſations of blind errors, ſloth, and ſluggiſhneſs, Ignorance, Covetouſneſs, Cruelty, and the like: Which I am very ſorry for; not onely for the ſake of your *Author* himſelf, who herein doth betray both his raſhneſs, and weakneſs; in not bridling his paſsions, and his too great preſumption, reliance and confidence in his own abilities, and extraordinary Gifts; but

but alſo for the ſake of the Fame and Repute of our Modren Phyſicians; for without making now any difference betwixt the *Galeniſts* and *Paracelſians*, and examining which are the beſt, (for I think them both excellent in their kinds, eſpecially when joyned together) I will onely ſay this in general, that the Art of Phyſick has never flouriſh'd better then now, neither has any age had more skilful, learned, and experienced Phyſicians, then this preſent; becauſe they have not onely the knowledg and practiſe of thoſe in ages Paſt, but alſo their own experience joyned with it, which cannot but add perfection to their Art; and I, for my part, am ſo much for the old way of Practice, that if I ſhould be ſick, I would deſire rather ſuch Phyſicians which follow the ſame way, then *thoſe, that by* their new Inventions, perchance, cure one, and kill a hundred. But your *Author* * will have a Phyſician to be like a Handycrafts man, who being call'd to a work, promiſes that work, and ſtands to his promiſe; and therefore, *It is a ſhame*, ſays he, *in a Phyſician, being call'd to a ſick-man in the beginning of the diſeaſe, and when his ſtrength is yet remaining, to ſuffer the ſame man to die:* This, in my opinion, is a very unreaſonable compariſon, to liken a Handicrafts man to a Phyſician, and the art of Curing to the art of Building, or any the like; without regard of ſo many great differences that are betwen them, which I am loth to rehearſe, for brevities ſake, and are apparant enough to every one that will conſider them: but this I may ſay, that it is not always for want of skill and induſtry in a Phyſician, that the cure is not effected, but it lies either in the Incureableneſs of the diſeaſe, or any other

* In his Promiſes, *Column.* 3.

externa-

external accidents that do hinder the ſucceſs: Not but that the beſt Phyſicians may err in a diſeaſe, or miſtake the Patients inward diſtemper by his outward temper, or the interior temper by his outward diſtemper, or any other ways; for they may eaſily err through the variation of the diſeaſe, which may vary ſo ſuddenly and oft, as it is impoſsible to apply ſo faſt, and ſo many Medicines, as the alteration requires, without certain death; for the body is not able, oftentimes, to diſpoſe and digeſt ſeveral Medicines ſo faſt, as the diſeaſe may vary, and therefore what was good in this temper, may, perhaps, be bad in the variation; inſomuch, that one medicine may in a minute prove a Cordial, and Poyſon. Nay, it may be that ſome Phyſicians do err through their own ignorance and miſtake, muſt we therefore condemn all the skill, and accuſe all the Schools of Negligence, Cruelty, and Ignorance? God forbid: for it would be a great Injuſtice. Let us rather praiſe them for the good they do, and not raſhly condemn them for the evil they could not help: For we may as well condemn thoſe holy and induſtrious Divines, that cannot reform wicked and perverſe Sinners, as Phyſicians, becauſe they cannot reſtore every Patient to his former health, the Profeſsion of a Phyſician being very difficult; for they can have but outward ſigns of inward diſtempers. Beſides, all men are not diſſected after they are dead, to inform Phyſicians of the true cauſe of their death; nay, if they were, perchance they would not give always a true information to the Phyſician, as is evident by many examples; but oftentimes the blame is laid upon the Phyſician, when as the fault is either in Nature, or any other cauſe, which Art could not

mend. And if your *Author* had had ſuch an extraordinary Gift from God as to know more then all the reſt of Phyſicians, why did he not accordingly, and as the Scripture ſpeaks of Faith, ſhew his *skill* by his Works and Cures? certainly, could he have reſtored thoſe that were born blind, lame, deaf and dumb, or cured the ſpotted Plague, or Apoplexy after the *third fit*, or the Conſumption of Vital parts, or a Fever in the Arteries, or diſſolved a Stone too big to go through the paſſage, and many the like; he would not onely have been cried up for a rare Phyſician, but for a miracle of the World, and worſhipped as a Saint: *But if* he could not effect more then the Schools can do, why doth he inveigh ſo bitterly againſt them? Wherefore I cannot commend him *in ſo doing*; *but as I reſpect the* Art of Phyſick, as a ſingular Gift from God to Mankind, ſo I reſpect and eſteem alſo learned and skilful Phyſicians, for their various Knowledg, induſtrious Studies, careful Practice, and great Experiences, and think every one is bound to do the like, they being the onely ſupporters and reſtorers of humane life and health: For though I muſt confeſs, with your *Author*, that God is the onely giver of Good, yet God is not pleaſed to work Miracles ordinarily, but has ordained means for the reſtoring of health, which the Art of Phyſick doth apply; and therefore thoſe Perſons that are ſick, do wiſely to ſend for a Phyſician; for Art, although it is but a particular Creature, and the handmaid of Nature, yet ſhe doth Nature oftentimes very good ſervice; and ſo do Phyſicians often prolong their Patients lives. The like do Chirurgeons; for if thoſe Perſons that have been wounded, had been

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left to be cured onely by the Magnetick Medicine, I believe, numbers that are alive would have been dead, and numbers would die that are alive; inſomuch, as none would eſcape, but by miracle, epecially if dangerouſly hurt. Concerning the Coveteouſneſs of Phyſicians, although ſickneſs is chargeable, yet I think it is not Charitable to ſay or to think, that Phyſitians regard more their Profit, then their Patients health; for we might as well condemn Divines for taking their Tithes and Stipends, as Phyſicians for taking their Fees: but the holy Writ tells us, that a Labourer is Worthy of his hire or reward; and, for my part, I think thoſe commit a great ſin, which repine at giving Rewards in any kind; for thoſe that deſerve well by their endeavours, ought to have their rewards; and ſuch Meritorious Perſons, I wiſh with all my Soul, may proſper and thrive. Nevertheleſs, as for thoſe perſons, which for want of means are not able to reward their Phyſicians, I think Phyſicians will not deal ſo unconſcionably, as to neglect their health and lives for want of their Fees, but expect the reward from God, and be recompenced the better by thoſe that have Wealth enough to ſpare. And this good opinion I have of them. So leaving them, I reſt,

MADAM,

Your conſtant Friend,

and faithful Servant.

MA-

XXIX.

MADAM,

I Am of your *Authors* mind, That *heat is not the cauſe of digeſtion*; but I diſſent from him, when he ſays, That it is *the Ferment of the ſtomach that doth cauſe it*: For, in my opinion, Digeſtion is onely made by regular digeſtive motions, and ill digeſtion is cauſed by irregular motions, and when thoſe motions are weak, then there is no digeſtion at all, but what was received, remains unaltered; but when they are ſtrong and quick, then they make a ſpeedy digeſtion. You may ask me, what are digeſtive motions? I anſwer, They are tranſchanging, or transforming motions: but ſince there be many ſorts of tranſchanging motions, digeſtive motions are thoſe, which tranſchange food into the nouriſhment of the body, and diſpoſe properly, fitly and uſefully of all the Parts of the food, as well of thoſe which are converted into nouriſhment, as of thoſe which are caſt forth. For give me leave to tell you, *Madam*, that ſome parts of natural Matter, do force or cauſe other parts of Matter to move and work according to their will, without any change or alteration of their parts; as for example, Fire and Metal; for Fire will cauſe Metal to flow, but it doth not readily alter it from its nature of being Metal; neither doth Fire alter its nature from being Fire. And again, ſome parts of Matter will cauſe other parts to work and act to their own will, by forcing theſe over-powred parts to

alter

alter their own natural motions into the motions of the victorious Party, and ſo transforming them wholly into their own Figure; as for example, Fire will cauſe Wood to move ſo as to take its figure, to wit, the figure of Fire, that is, to change its own figurative motions into the motions of Fire: and this latter kind of moving or working is found in digeſtion; for the regular digeſtive motions do turn all food received from its own nature or figure, into the nouriſhment, figure, or nature of the body, as into fleſh, blood, bones, and the like. But when ſeveral parts of Matter meet or joyn with equal force and power, then their ſeveral natural motions are either quite altered, or partly mixt: As for example; ſome received things not agreeing with the natural conſtitution of the body, the corporeal motions of the received, and thoſe of the receiver, do diſpute or oppoſe each other: for the motions of the received, not willing to change their nature conformable to the deſire of the digeſtive motions, do reſiſt, and then a War begins, whereby the body ſuffers moſt; for it cauſes either a ſickneſs in the ſtomack, or a pain in the head, or in the heart, or in the bowels, or the like: Nay, if the received food gets an abſolute victory, it diſſolves and alters oftentimes the whole body, it ſelf remaining intire and unaltered, as is evident in thoſe that die of ſurfeits. But moſt commonly theſe ſtrifes and quarrels, if violent, do alter and diſſolve each others forms or natures. And many times it is not the fault of the Received, but of the Receiver; as for example, when the digeſtive and transforming motions are either irregular, or weak; for they being too weak, or too few, the meat or food received is digeſted onely by halves; and

being irregular, it cauſes that which we call corruption. But it may be obſerved, that the Received food is either agreeable, or diſagreeable, to the Receiver; if agreeable, then there is a united conſent of Parts, to act regularly and perfectly in digeſtion; if diſagreeable, then the Received acts to the Ruine, that is, to the alteration or diſſolution of the Nature of the Receiver; but if it be neutral, that is, neither perfectly agreeable, nor perfectly diſagreeable, but between both, then the receiver, or rather the digeſtive Motions of the receiver, uſe a double ſtrength to alter and transform the received. But you may ask me, *Madam*, what the reaſon is, that many things received, after they are diſſolved into ſmall parts, thoſe parts will keep their former colour and ſavour? I anſwer; The cauſe is, that either the retentive Motions in the Parts of the received, are too ſtrong for the digeſtive and alterative Motions of the receiver, or perchance, this colour and ſavour is ſo proper to them, as not to be tranſchanged: but you muſt obſerve, that thoſe digeſtive, alterative and tranſchanging motions, do not act or move all after one and the ſame manner; for ſome do diſſolve the natural figure of the received, ſome diſperſe its diſſolved parts into the parts of the body, ſome place the diſperſed parts fitly and properly for the uſe, benefit, and conſiſtence of the body; for there is ſo much variety in this one act of digeſtion, as no man is able to conceive; and if there be ſuch variety in one Particular natural action, what variety will there not be in all Nature? Wherefore, it is not, as I mentioned in the beginning, either Ferment, or Heat, or any other thing, that cauſes digeſtion; for if all the conſtitution and

nature of our body was grounded or did depend upon Ferment, then Brewers and Bakers, and thoſe that deal with Ferments, would be the beſt Phyſicians. But I would fain know the cauſe which makes Ferment? You may ſay, ſaltneſs, and ſowreneſs. But then I ask, From whence comes ſaltneſs and ſowreneſs? You may ſay, From the Ferment. But then I ſhall be as wiſe as before. The beſt way, perhaps, may be to ſay, with your *Author*, that Ferment is a Primitive Cauſe, and a beginning or Principle of other things, and it ſelf proceeds from nothing. But then it is beyond my imagination, how that can be a Principle of material things, which it ſelf is nothing; that is, neither a ſubſtance, nor an accident. Good Lord! what a ſtir do men make about nothing! I am amazed to ſee their ſtrange Fancies and Conceptions vented for the Trueſt Reaſons: Wherefore I will return to my ſimple opinion; and as I cannot conceive any thing that is beyond Matter, or a Body; ſo I believe, according to my reaſon, that there is not any part in Nature, be it never ſo ſubtil or ſmall, but is a ſelf-moving ſubſtance, or endued with ſelf-motion; and according to the regularity and irregularity of theſe motions, all natural effects are produced, either perfect, or imperfect; timely births, or unimely and monſtrous births; death, health, and diſeaſes, good and ill diſpoſitions, natural and extravagant Appetites and Paſsions, (I ſay natural, that is, according to the nature of their figures;) Sympathy and Antipathy, Peace and War, Rational and Phantaſtical opinions. Nevertheleſs, all theſe motions, whether regular or irregular, are natural; for regularity

larity and irregularity hath but a reſpect to particulars, and to our conceptions, becauſe thoſe motions which move not after the ordinary, common or uſual way or manner, we call Irregular. But the curioſity and variety in Nature is unconceiveable by any particular Creature; and ſo leaving it, I reſt,

MADAM,

Your faithful Friend

and Servant.

XXX

MADAM,

[a] *Ch.* Of a Six-fold digeſtion.

YOur *Author* ſays [a], it is an ancient Truth, *That whatſoever things, meats being digeſted and caſt out by vomit, are of a ſowre taſte and ſmell, yea, although they were ſeaſoned with much ſugar.* But I do not aſſent to this opinion; for I think that ſome Vomits have no more taſte then pure Water hath. Neither am I of his mind, That *Digeſtion is haſtened by ſharpneſs or tartneſs*: For do but try it by one ſimple experiment; take any kind of fleſh-meat, boyl or ſtew it with Vinegar, or ſowre wine, or with much ſalt; and you will find, that it doth require a longer time, or rather more motions to diſſolve, then if you boyl it in fair water, without ſuch ingredients as are ſowre, ſharp, or ſalt; alſo if you do but obſerve, you will find the dregs more ſandy, ſtony and hard, being dreſt with much ſalt, and

ſharp,

ſharp wine, or vinegar, then when they are not mixt with ſuch contracting and fixing Ingredients? Wherefore, if the Ferment of the ſtomack hath ſuch a reſtringent and contracting quality, certainly digeſtions will be but ſlow and unprofitable; but Nature requires expulſion as much as attraction, and dilation as much as contraction, and digeſtion is a kind of dilation. Wherefore, in my judgment, contracting tartneſs and ſharpneſs doth rather hinder digeſtion then further it. Next I perceive, your *Author* inclines to the opinion, *That Choler is not made by meat* *: But I would ask him, whether any humor be made of meat, or whether blood, fleſh, *&c.* are made and nouriſhed by meat? If they be not, then my anſwer is, That we eat to no purpoſe; but if they be, then Choler is made ſo too. But if he ſays, That ſome are made, and ſome not; then I would ask, what that humor is made of, that is not made by meat or food received into the body? But we find that humors, blood, fleſh, *&c.* will be ſometimes more, ſometimes leſs, according either to feeding, or to digeſtion, which digeſtion is a contribution of food to every ſeveral part of the body for its nouriſhment; and when there is a decay of thoſe parts, then it is cauſed either by faſting, or by irregular digeſtion, or by extraordinary evacuation, or by diſtempered matter, *&c.* all which, cauſes ſickneſs, paleneſs, leanneſs, weakneſs, and the like. Again: your *Author* is againſt the opinion of the Schools, *That the Gall is a receptacle of ſuperfluous humors and dregs*: for he ſays, *it has rather the conſtitution of a neceſſary and vital bowel, and is the balſom of the liver and blood.* Truly, it may be ſo, for any thing I know, or

* See *The paſsive deceiving of the Schools, the humoriſts, c.* 1.

it may be not; for your *Author* could but gueſs, not aſſuredly know, unleſs he had been in a man as big as the Whale in whoſe belly *Jonas* was three days, and had obſerved the interior parts and motions of every part for three years time, and yet he might perchance have been as ignorant at the coming forth, as if he never had been there; for Natures actions are not onely curious, but very various; and not onely various, but very obſcure; in ſo much, as the moſt ingenious Artiſts cannot trace her ways, or imitate her actions; for Art being but a Creature, can do or know no more then a Creature; and although ſhe is an ingenious Creature, which can and hath found out ſome things profitable and uſeful for the life of others, yet ſhe is but a handmaid to Nature, and not her Miſtreſs; which your *Author*, in my opinion, too raſhly affirms, when he ſays, That *the Art of Chymiſtry is not onely the Chambermaid and emulating Ape, but now and then the Miſtreſs of Nature*: For Art is an effect of Nature, and to prefer the effect before the cauſe, is abſurd. But concerning Chymiſtry, I have ſpoken in another place; I'le return to my former Diſcourſe: and I wonder much why your *Author* is ſo oppoſite to the Schools, concerning the doctrine of the Gall's being a receptacle for ſuperfluities and dregs; for I think there is not any Creature that has not places or receptacles for ſuperfluous matter, ſuch as we call dregs; for even the pureſt and hardeſt Mineral, as Gold, has its droſs, although in a leſs proportion then ſome other Creatures; nay, I am perſwaded, that even Light, which your *Author* doth ſo much worſhip, may have ſome ſuperfluous matter, which may be named dregs; and ſince Nature

b. Heat doth not direct efficintly.

Nature has made parts in all Creatures to receive and diſcharge ſuperfluous matter, (which receiving and diſcharging is nothing elſe but a joyning and dividing of parts to and from parts,) why may not the Gall be as well for that uſe as any other part? But I pray miſtake me not, when I ſay *ſuperfluous matter or dregs*; for I underſtand by it, that which is not uſeful to the nouriſhment or conſiſtence of ſuch or ſuch a Creature; but to ſpeak properly, there is neither ſuperfluity of matter nor dregs in Nature. Moreover, your *Author* mentions a *ſix-fold digeſtion*, and makes every digeſtion to be performed by inbreathing or inſpiration; For *in the firſt digeſtion*, he ſays, *The ſpleen doth inſpire a ſowre Ferment into the Meat: In the ſecond, The Gall doth inſpire a ferment, or fermental blas into the ſlender entrails: In the third, The Liver doth inſpire a bloody ferment into the veins of the Menſentery*, &c. I anſwer, firſt, I am confident Nature has more ways then to work onely by Inſpirations, not onely in General, but in every Particular. Next, I believe there are not onely ſix, but many more digeſtions in an animal Creature; for not onely every ſort of food, but every bit that is eaten, may require a ſeveral digeſtion, and every ſeveral part of the body works either to expel, or preſerve, or for both; ſo that there are numerous ſeveral Motions in every Creature, and many changes of motions in each particular part; but Nature is in them all. And ſo leaving her, I reſt,

MADAM,

Your Faithful Friend

and Servant.

MA-

XXXI.

MADAM,

YOur *Author*, in oppoſition to the Schools, endeavouring to prove that there are no humors in an animal body, except blood, proves many humors in himſelf. But I can ſee no reaſon, why Nature ſhould not make ſeveral humors, as well as ſeveral Elements, Vegetables, Minerals, Animals, and other Creatures; and that in ſeveral parts of the body, and many ſeveral ways; for to mention but one ſort of other Creatures, *viz.* Vegetables, they are, as we ſee, not onely produced many ſeveral ways, but in many ſeveral grounds; either by ſowing, ſetting, or grafting, either in clayie, limy, ſandy, chalky, dry, or wet grounds: And why may not ſeveral humors be produced as well of other Creatures and parts, as others are produced of them? for all parts of Nature are produced one from another, as being all of one and the ſame Matter, onely the variation of corporeal motions makes all the difference and variety between them, which variety of motions is impoſsible to be known by any particular Creature; for Nature can do more then any Creature can conceive. Truly, *Madam*, I ſhould not be of ſuch a mind, as to oppoſe the Schools herein ſo eargerly as your *Author* doth; but artificial actions make men to have erroneous opinions of the actions of Nature, judging them all according to the rule and meaſure of Art, when as

Art

Art oft deludes men under the cover of truth, and makes them many times believe falſhood for truth; for Nature is pleaſed with variety, and ſo doth make numerous abſurdities, doubts, opinions, diſputations, objections, and the like. Moreover, your *Author* is as much againſt the radical moiſture, as he is againſt the four humors; ſaying, that according to this opinion of the Schools, a fat belly, through much greaſe affording more fuel to the radical moiſture, muſt of neceſsity live longer. But this, in my opinion, is onely a wilful miſtake; for I am confident, that the Schools do not underſtand radical moiſture to be groſs, fat radical oyl, but a thin oylie ſubſtance. Neither do they believe radical heat to be a burning, fiery and conſuming heat, but ſuch a degree of natural heat, as is comfortable, nouriſhing, refreſhing, and proper for the life of the animal Creature: Wherefore radical heat and moiſture doth not onely conſiſt in the Greaſe of the body; for a lean body may have as much, and ſome of them more Radical moiſture, then fat bodies. But your *Author* inſtead of this radical moiſture, makes a nouriſhable moiſture, onely, as I ſuppoſe, out of a mind to contradict the Schools; when as I do not perceive, that the Schools mean by Radical moiſture, any other then a nouriſhable moiſture, and therefore this diſtinction is needleſs. Laſtly, he condemns the Schools, for making an affinity betwixt the bowels and the brain. But he might as will condemn Politicians, for ſaying there is an affinity betwixt Governors and Subjects, or betwixt command and obedience; but as the actions of Particulars, even from the meaneſt in a Commonwealth, may chance to make a Publick diſturbance, ſo

likewiſe in the Common-wealth of the body, one ſingle action in a particular part may cauſe a diſturbance of the whole Body, nay, a total ruine and diſſolution of the compoſed; which diſſolution is called Death; and yet theſe cauſes are neither Light, nor Blas, nor Gas, no more then men are ſhining Suns, or flaming Torches, or blazing Meteors, or azure Skies. Wherefore leaving your *Author* to his contradicting humor, I reſt,

MADAM,

Your faithful Friend

and Servant.

XXXII.

MADAM,

I Do verily believe, with the Schools, the *Purging of the Brain*, againſt your *Author*[a]; For I know no reaſon, why all the parts of a man's body ſhould not ſtand in need of evacuation and purging, as well as ſome. 'Tis true, if the ſubſtance or nouriſhment received were all uſeful, and onely enough for the maintenance, ſubſiſtance and continuance of the Creature, and no more, then there would be no need of ſuch ſort of evacuation; but I believe the corporeal ſelf-motions in a body, diſcharge the ſuperfluous matter out of every part of the body, if the motions of the ſuperfluous matter be not too ſtrong, and over-power the motions in the

[a] *Ch.* Call'd *The Erring Watchman, or Wandring Keeper.*

the parts of the body; but ſome parts do produce more ſuperfluities then others, by reaſon their property is more to dilate, then to contract, and more to attract, then to retain or fix; which parts are the brain, ſtomack, bowels, bladder, gall, and the like: wherefore, as there is nouriſhment in all parts of the body, ſo there are alſo excrements in all parts, for there is no nouriſhment without excrement. Next your *Author* ſays, That *the nouriſhment of the ſolid parts is made with the tranſmutation of the whole venal blood into nouriſhment, without a ſeparation of the pure from the impure.* But I pray give me leave to ask, *Madam*, whether the ſolid Parts are not Inſtruments for the nouriſhment of the Venal blood? Truly, I cannot conceive, how blood ſhould be nouriſhed, wanting thoſe ſolid parts, and their particular motions and imployments. Again: his opinion is, *That the brain is nouriſhed by a few and ſlender veins; neither doth a paſſage or channel appear whereby a moiſt excrement may derive, or a vapour enter.* And by reaſon of the want of ſuch a paſſage, in another place [a] he is pleaſed to affirm, *That nothing can fume up from the ſtomack into the brain*, and therefore *Wine doth not make drunk with fuming from the ſtomach into the head, but the Winie ſpirit is immediately ſnatched into the arteries out of the ſtomack without digeſtion, and ſo into the head, and there breeds a confuſion.* First, I am not of the opinion, that all nouriſhment comes from the veins, or from one particular part of the body, no more do Excrements; neither do I believe that every paſſage in the body is viſible to Anatomiſts, for Natures works are too curious and intricate for any particular Creature to find them out, which is the cauſe that Anatomiſts and Chymiſts are ſo

[a] *Ch.* call'd *The Spirit of Life.*

oft

oft miſtaken in natural cauſes and effects; for certainly, they ſometimes believe great Errors for great Truths. Next, as for Drunkenneſs, I believe that many, who drink much Wine, are drunk before ſuch time as the Wine ſpirit can get into the Arteries; but if there be Pores to the Brain, as it is moſt probable, the ſpirit of Wine may more eaſily aſcend and enter thoſe Pores, then the Pores of the Arteries, or the Mouth-veins, and ſo make a circular journey to the Head. But as for Excrements, whereof I ſpake in the beginning, as they are made ſeveral manners or ways, and in ſeveral parts of the body, ſo they are alſo diſcharged ſeveral ways from ſeveral parts, and ſeveral ways from each particular part, indeed ſo many ſeveral ways and manners, as would puzzle the wiſeſt man in the world, nay your *Authors Interior keeper of the Brain*, to find them out. Wherefore, to conclude, he is the beſt Phyſician, that can tell how to diſcharge ſuperfluity, and to retain uſeful nouriſhments; or to reſtore by the application of proper Medicines, decaying parts, or to put in order Irregular motions; and not thoſe that have Irregular opinions of Immaterial cauſes: To which, I leave them, and reſt,

MADAM,

Your faithful Friend

and humble Servant.

XXXIII.

MADAM,

I Do not approve of your *Authors* Doctrine, forbidding Phlebotomy or blood-letting in Fevers, oppoſite to the received Practice of the Schools; his reaſon is, that he believes there can be no corruption in the blood. *Corrupted blood;* ſays he, *cannot be in the veins, neither doth a ſtate of ill juice conſiſt in the veins; for Gangrenes do teach, that nothing of Putrified matter can long perſiſt without a further contagion of it ſelf.* Alſo he ſays, *That the blood of the veins is no otherwiſe diſtinguiſhed by its ſeveral colours and ſigns, then as wine is troubled when the vine flouriſheth.* To which I anſwer, firſt, That I can ſee no reaſon why there ſhould not be as well corrupt blood, or an ill ſtate of juice in the veins, as ill humors in the body. Perchance he will ſay, There is no corruption in the body. But Ulcers do teach the contrary. He may reply, Ulcers are not parts of the body. I anſwer, 'Tis true; but yet they are evil Inhabitants in the body, and the like may be in the Veins. But ſurely ſome men may have corrupted parts of their bodies, and yet live a great while; witneſs Ulcers in the Lungs, and other parts. But your *Author* may ſay, When a part of the body is corrupted, it is no longer an animal Part. I grant it: but yet, as I ſaid, that transformed part may remain in the body ſome time without deſtruction of the whole body; and ſo likewiſe, when ſome of the

In his Treatiſe of Fevers, *c.* 4.

blood, is tranſchanged from being blood, ſo as not to be capable to be reduced again, it may nevertheleſs remain in the veins without deſtruction of the veins, or of the whole body: Neither do I conceive any reaſon, why corrupt blood ſhould Gangrene in the veins, and infect the adjoyning parts more then corrupted lungs do. Next, as for the compariſon of the various colours and ſigns of the blood, with Wine being troubled when the Vine is flouriſhing; I anſwer, That it doth not prove any thing; for we ſpeak of ſuch colours, as are ſigns of corrupted, and not ſuch as are ſigns of troubled blood: Beſides, it is an unlike compariſon; for though Wine may become thick by much fermentation, yet it doth not turn into water, as blood in ſome ſick and diſeaſed perſons will do. But corrupted blood may be, not onely in the veins of ſick, but alſo of healthy perſons; and the ſtory ſays, that *Seneca*, when his veins were cut, they would not bleed, although in a hot Bath, by reaſon that which was in the veins, was rather like a white jelly, then blood, and yet he was healthy, though old; which proves, that it is not neceſſary for the blood to be ſo pure and fluid as your *Author will* have it. The truth is, the more fluid the blood is, the weaker it is; like balſam, the more gummy it is, the ſtronger it is: but veins, which are the mouth, to receive or ſuck in juices, as alſo the ſtomack which digeſts the meat that after is turned into blood, may be defective either through weakneſs, ſuperfluity, obſtruction, corruption, or evil and hurtful diet, or through the diſorders of other particular parts, which may diſturb all the parts in general, as skilful Phyſicians have obſerved, and therefore apply remedies accordingly

cordingly; for if the defect proceeds from weakneſs, they give ſtrengthening remedies; if from ſuperfluities, they give evacuating remedies; if from evil diets, they preſcribe ſuch a courſe of diet as ſhall be beneficial, and conducing for the reſtoring of health to the whole body. But your *Author*, as I perceive, believes the blood to be the chief vital part of the body; which ſurely it is not: for if it were, the leaſt diſturbance of the blood would endanger the life of the whole body, and the leaſt diminution would cauſe a total diſſolution of that animal Creature which has blood: Not but that blood is as neceſſary as breath for reſpiration, and food for nouriſhment of the body; but too much blood is as dangerous to the life of the animal body, as too great a piece of food, which cannot be ſwallowed down, but doth ſtick in the throat, and ſtop the breath, or ſo much quantity as cannot be digeſted; for too great a fulneſs or abounding makes a ſtoppage of the blood, or which is worſe, cauſes the veins to break, and an evil digeſtion, makes a corruption, or at leaſt ſuch diſorder as to indanger the whole animal Figure. But ſome veins breed more blood, and ſome leſs, and ſome better, and ſome worſe blood, ſome hotter, and ſome colder, ſome groſſer, and ſome purer, ſome thicker, and ſome thinner; and ſome veins breed rather an evil juice or corrupt matter then pure blood; the truth is, blood is bred ſomewhat after the manner of Excrements, for the veins are ſomewhat like the guts, wherein the excrements are digeſted. But you will ſay, A man may live without excrements, but not without blood. I anſwer: a man can live no more without excrements and excremental humors, then he can without blood: but yet I am not

of.

of your *Authors* mind, that bleeding and purging are deſtructive; for ſuperfluities are as dangerous as ſcarcities, nay more; like as an houſe filled with rubbiſh is in more danger to ſink or fall, then that which is empty; and when a houſe is on fire, it is wiſdom to take out the Moveables, but a folly to let them increaſe the flame. But your *Author* ſays, Blood-letting takes not onely away the bad, but alſo the good blood, by which it diminiſhes and impairs much the ſtrength of the body. I will anſwer by way of queſtion, Whether in War men would not venture the loſs of ſome few friends, to gain the victory, or ſave the whole body of the Army? or whether the deſtroying of the enemies Army be not more advantageous, then the loſs of ſome few friends? For although ſome good blood may iſſue out with the bad, yet the veins have more time, room, and ſome more power to get friendly juices from the ſeveral parts of the body, which will be more obedient, truſty, and true to the life and ſervice of the whole body. But neither Fevers, nor any other diſtempers, will be more afraid of your *Authors* words, Stones, Spirits, as alſo Rings, Beads, Bracelets, and the like toys, fitter for Children to play withal, then for Phyſicians to uſe; then an Army of men will be of their enemies Colours, Enſigns, Feathers, Scarfs, and the like; knowing it muſt be Swords, Piſtols, Guns, Powder and Bullets, that muſt do the buſineſs to deſtroy the enemy, and to gain the victory: Wherefore in Diſeaſes it muſt be Bleeding, Purging, Vomiting, uſing of Clyſters, and the like, if any good ſhall be done. 'Tis true, they muſt well be ordered, otherwiſe they will do more hurt then good; for Diſeaſes are like Enemies, which ſometimes

times take away our Armes for their own uſes. But your *Anthor* ſays again, *That the Matter of a Fever floats not in the veins, nor ſits nigh the heart.* I anſwer: There are ſeveral ſorts of Fevers; for all Fevers are not produced after one and the ſame manner, or from one and the ſame cauſe, as is very well known to wiſe and experienced Phyſicians; but although ſome Fevers are not in the blood, yet that doth not prove, that the blood is never in a Fever; for ſometimes the blood is in a Fever, and not the ſolid parts; and ſometimes the fluid and moveable humors, and not the blood, or ſolid parts; and ſometimes the ſolid parts, and not the blood, nor the liquid and moveable humors; and ſometimes they are all in a Fever; and ſometimes onely the radical parts, and neither the blood, humors, nor ſolid parts: and this laſt kind of Fever, which is a hectick Fever, in my opinion, is incureable; but the others may be cureable, if there be not too many varieties of diſtempers, or irregular motions. And as for a Fever in the ſolid parts, Letting of blood, and taking away the humor, may cure it; for the veins being empty, ſuck the heat out of the ſolid parts, which ſolid parts cannot draw out a diſtempered heat in the veins, and the opening of the veins gives vent to ſome of the interior heat to iſſue forth: Wherefore it is very requiſite, that in all ſorts of Fevers, except Hectick Fevers, blood-letting ſhould be uſed, not onely once, but often; for 'tis better to live with a little blood, and a little ſtrength, which will ſoon be recovered, then to die with too much, or too hot and diſtempered blood. Alſo Purging, but eſpecially Vomiting is very good; for if the humors be in a Feaver, they

may infect the vital parts, as alſo the blood; but if they be not in a Fever, yet the ſolid parts or blood may do the ſame, and ſo make the contagion greater; for the humors are as the moveables in a houſe, which ought to be caſt out if either they or the houſe ſhould be on fire; and if a diſorder proceeds from the error of a particular part, then care muſt be taken to rectifie that part for the health of the whole: Wherefore Phyſicians uſe in ſome caſes Blood-letting, in ſome Purging, in ſome Vomiting, in ſome Bathing, in ſome Sweating, in ſome Cordials, eſpecially after much evacuation, in ſome they preſcribe a good diet, and in ſome they mix and preſcribe partly one and partly the other, and in ſome caſes they are forced to uſe all theſe remedies; for though great evacuations may cauſe weakneſs, yet they often ſave the life; and there is no Patient, but had rather loſe ſome ſtrength, then life; for life can gather ſtrength again; but all ſtrong men are not always long lived, nor all long-lived men very ſtrong; for many that are but weak, will live to a very old age. Laſtly, concerning what your *Author* ſays, that there is but one Choler and Phlegme in Nature; I anſwer, That is more then he knows: for all that is in Nature, is not nor cannot be known by any Particular Creature; and he might ſay, as well, the ſame of particular Metals, as that there is but one ſort of Gold or Silver, when as there is great difference in the weight, purity, colour, and gloſs, of ſeveral parts of Gold and Silver: Neither is all Gold found in one place; but ſome is found in Rocks, ſome in Sand, ſome in Mines, ſome in Stones; and ſo Silver, ſome is found in the bowels of the Earth, ſome in the veins of Stones, and ſome in other Metals, as Lead,

and

and Iron, and ſome in Coals. And the like may be ſaid of Choler and Phlegme; for they may be ſeveral in ſeveral places or parts of the body, and be of different colours, taſtes, odours, and degrees of heat or cold, thinneſs or thickneſs, or the like; for though there is but one Matter in Nature, yet this onely Matter by its ſeveral actions or motions changes into ſeveral figures, and ſo makes ſeveral ſorts of Creatures, and different particulars in every ſort. And thus, *Madam*, I have delivered unto you my opinion concerning the cure of Fevers by Blood-letting: Which I ſubmit to the correction of your better judgment, and reſt,

MADAM,

Your faithful Friend

and Servant.

XXXIV

MADAM,

YOur *Author* is not onely againſt Phlebotomy or Blood-letting, but againſt all Purging Medicines, which he condemns to *carry a hidden poyſon in them, and to be a cruel and ſtupid invention.* But certainly he ſhall not have my aſſent; for if they be Poyſon, they are a very beneficial Poyſon; and Phyſical Purgations, in my opinion, are very neceſſary and profitable for the prolonging of life, and taking away of diſeaſes, provided they be proper for thoſe diſeaſes in which they

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are uſed; and ſo is Phlebotomy, Vomits, and the like: but Medicines are often wrong applyed, and many times the diſeaſe is ſo various, that it is as hard for a Phyſician to hit right with ſeveral Medicines, as for a Gunner or Shooter to kill with Powder and ſmall Shot a Bird flying in the Air; not that it is not poſsible to be done, but it is not ordinary, or frequent: neither doth the fault onely lie in the Gun, Powder, or Shot, but in the ſwiftneſs of the flight of the Bird, or in the various motion of the air, or in a ſudden wind, or miſt, or the like; for the ſame Gunner may perhaps eaſily kill a Bird ſitting in a buſh, or hopping upon the ground. The like may be ſaid of Diſeaſes, Phyſicians, and Medicines; for ſome diſeaſes have ſuch ſudden alterations, by the ſudden changes of motions, that a wiſe Phyſician will not, nor cannot venture to apply ſo many ſeveral medicines ſo ſuddenly as the alteration requires; and ſhall therefore Phyſicians be condemned? and not onely condemned for what cannot be helped by reaſon of the variety of irregular motions, but what cannot be helped in Nature? For ſome diſeaſes are ſo deadly, as no art can cure them, when as otherwiſe Phyſicians with good and proper medicines, have, and do as yet reſcue more people from death, then the Laws do from ruine. Nay, I have known many that have been great enemies to Phyſick, die in the flower of their age, when as others which uſed themſelves to Phyſick, have lived a very long time. But you may ſay, Country-people and Labourers, take little or no Phyſick, and yet grow moſt commonly old, whereas on the contrary, Great and rich Perſons take much Phyſick, and do not live ſo long as the common ſort of men doth. I anſwer: It is

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to be obſerved, firſt, that there are more Commons, then Nobles, or Great and rich perſons; and there is not ſo much notice taken of the death of a mean, as of a noble, great, or rich perſon; ſo that for want of information or knowledg, one may eaſily be deceived in the number of each ſort of perſons. Next, the Vulgar ſort uſe laborious exerciſes, and ſpare diet; when as noble and rich perſons are moſt commonly lazie and luxurious, which breeds ſuperfluities of humors, and theſe again breed many diſtempers: For example, you ſhall find few poor men troubled with the Gout, Stone, Pox, and the like diſeaſes, nor their Children with Rickets; for all this cometh by luxury, and no doubt but all other diſeaſes are ſooner bred with luxury, then temperance; but whatſoever is ſuperfluous, may, if not be taken away, yet mediated with lenitive and laxative medicines. But as for Phyſicians, ſurely never age knew any better, in my opinion, then this preſent, and yet moſt of them follow the rules of the Schools, which are ſuch as have been grounded upon Reaſon, Practice, and Experience, for many ages: Wherefore thoſe that will wander from the Schools, and follow new and unknown ways, are, in my opinion, not Orthodoxes, but Hereticks in the Art of Phyſick. But to return to your *Author*, give me leave, *Madam*, to conſider what his opinions are concerning the Purging of Choler; *Come on*, ſays he to the Schools [a], *Why doth that, your Choler following with ſo ſwift an efflux, ſtink ſo horribly, which but for one quarter of an hour before did not ſtink?* To which it may be anſwered, That though humors may not ſtink in themſelves, yet the excrements mixt with the humors may ſtink; alſo the very paſsing tho-

[a] In his Treatiſe of Fevers, *c.* 5.

row the excrements will cauſe a ſtrong ſavour. But your *Author* thinks, That *by paſsing through ſo ſuddenly, the humors cannot borrow ſuch a ſmell of ſtinking dung from the Inteſtines.* Truly, 'tis eaſily ſaid, but hardly proved, and the contrary is manifeſt by putting clear, pure water into a ſtinking veſſel, which ſtraightway is corrupted with an ill ſmell. He talks alſo of *Vitriol diſſolved in Wine, which if it be taken, preſently provokes vomit; but if after drinking it, any one ſhall drink thereupon a draught of Ale or Beer, or Water, &c. he indeed ſhall ſuffer many ſtools, yet wholly without ſtink.* I anſwer: This expreſſes Vitriol to be more poyſonous, by taking away the natural ſavour of the bowels, then Scammony, Coloquintida, Manna, Caſsia, Sena, Rhubarb, *&c.* to all which your *Author* is a great enemy; and it is well known to experienced Phyſicians, that Medicines prepared by the art of fire are more poyſonous and dangerous then natural drugs; nay, I dare ſay, that many Chymical Medicines, which are thought to be Cordials, and have been given to Patients for that purpoſe, have proved more poyſonous then any Purging Phyſick. Again your *Author* ſays, *It is worthy of Lamentation, that Phyſicians would have looſening things draw out one humor, and not another, by ſelection or choyce.* My anſwer is, That natural drugs and ſimples are as wiſe in their ſeveral operations, as Chymiſts in their artificial diſtillations, extractions, ſublimations, and the like; but it has long been obſerved by Phyſicians, that one ſimple will work more upon one part of the body, then upon another; the like may be ſaid of humors. But give me leave to tell you, *Madam,* that if your *Author* believes magnetick or attractive cures (as he doth, and

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in whoſe behalf he makes very long diſcourſes) he doth in this opinion contradict himſelf. He may ſay, perhaps, There is no ſuch thing as what Phyſicians name humors. But grant there be none, yet he cannot deny that there are offenſive juices, or moveable ſubſtances made by evil, as irregular digeſtions, which may be troubleſom and hurtful to the nature of the body. Or perchance he will ſay, There are ſuch humors, but they are beneficial and not offenſive to the nature of the body. I anſwer: Then he muſt make an agreement with every part of the body, not to make more of theſe humors then is uſeful for the body. Alſo he mentions ſome few that took Purging Phyſick, and died. Truly ſo they might have done without taking it: but he doth not tell, how many have died for want of proper and timely Purges. In truth, *Madam*, 'tis an eaſie thing to find fault, but not ſo eaſie to mend it. And as for what he ſpeaks of the weighing of thoſe humors and excrements, which by purging were brought out of ſome Princes body, and how much by the *Schools* rules remained, and of the place which ſhould maintain the remainder; I onely ſay this, that all the ſeveral ſorts of juices, humors, or moveable ſubſtances in a body, do not lie in one place, but are diſperſed, and ſpread all about and in ſeveral parts and places in the body; ſo that the ſeveral Laxative medicines do but draw them together, or open ſeveral parts, that they may have freedom to travel with their chief Commanders, which are the Purging medicines. But your *Author* ſays, the Loadſtone doth not draw ruſt. And I ſay, no more do Purging drugs draw out pure Matter: for it may be as natural for ſuch medicines to draw or work

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onely upon ſuperfluities, that is, corrupted, or evil-affected humors, juices or moveable ſubſtances, as for the Loadſtone to draw Iron; and ſo it may be the property of Purges to draw onely the ruſt of the body, and not the pure metal, which are good humors. But few do conſider or obſerve ſufficiently the variety of Natures actions, and the motions of particular natural Creatures, which is the cauſe they have no better ſucceſs in their cures. And ſo leaving them to a more diligent inquiſition and ſearch into Nature and her actions. I reſt.

MADAM,

Your faithful Friend

and humble Servant.

XXXV.

MADAM,

I Find your *Author* to be as great an enemy to *Iſſues*, Cauteries, Clyſters, and the like, as he is to Blood-letting and Purging; eſpecially to Iſſues, which he counts to be blaſphemous againſt the Creator, and blames much the Schools for preſcribing them. But concerning Blood-letting and Purging, I have declared my opinion in my former Letters; and if you deſire my judgment of Clyſters and Iſſues, I muſt needs tell you, that it is well known theſe many ages, that in ſuch diſeaſes which lie in the guts, and cauſe pain in the head, and ſtop the ureteres, Clyſters have been very beneficial;

ficial, but wiſe Phyſicians do not preſcribe them, unleſs upon neceſsity: As for example; if the diſeaſe in the Guts proceed from cold or wind, they preſcribe a Sack-Clyſter, with oyl of Walnuts; and if the diſeaſe in the guts proceed from a ſharp or bitter humor, then they preſcribe Milk, or Poſſet, ſweetned with Sugar: the ſame *if the* guts be too full of excrements or ſlime. But in caſe of diſeaſes in the head or ſtomack, they preſcribe attractive Clyſters, to wit, ſuch as draw down from the upper into the lower parts, wherein the Phyſical drugs are; and if the guts be too dry, or dryer then their nature requires, they preſcribe moiſtening Clyſters, ſuch as have not onely wetting, but ſlimy qualities. And ſurely Clyſters properly and timely applyed, are a ſafe, ſpeedy, eaſie and profitable medicine, and far more ſafe then Chymical Salts, Tartars, Spirits, or the like. Next concerning Iſſues and Cauteries, your *Author*, I ſay, is ſo much againſt them, as he counts them a blaſphemy; for ſays he [a], *I have beheld always an implicite blaſphemy in a Cautery, whereby they openly accuſe the Creator of inſufficiency in framing the emunctories; for I have bidden above a thouſand Iſſues to be filled up with fleſh.* Alſo, *That which God hath made whole and entire, that it might be very good, ſeems to the Schools, that it ſhould be better if it be kept wounded.* Truly, *Madam*, in my opinion, it is no blaſphemy at all, neither directly nor indirectly, to make Iſſues, but a meer ſuperſtition to believe the contrary, *viz.* that they are blaſphemy, and a great folly not to make them when need requires it to the preſervation of ones health. *God has made our body whole and intire*, ſays your *Author*: by which he will prove that no holes muſt be made in the body to let out excre-

[a] Of Cauteries.

excrementious matter, and therefore he thinks that body to be whole and intire which is without an Iſſue, when as yet our bodies have numerous iſſues, which are the pores of the skin, to let out ſweat; and therefore if he counts that body not to be whole and intire that has Iſſues, then no humane body is intire. Certainly, no Artificial Iſſue will make the body maimed, *but it* will nevertheleſs continue whole and intire although it has Iſſues. He ſays it is Blaſphemy; But how will he prove it? Surely not by the *Scripture*; and if not by the Scriptnre, then *it is a blaſphemy* according to his own brain and fancy. 'Tis true, God gave no expreſs Command to make Iſſues; but according to your *Author*, God did never create Diſeaſes, and ſo there was no need either to make ſuch Iſſues *in bodies as to let out* diſtempered Matter, or to give any command for them; but we might as well ſay, we muſt not uſe any Phyſick, becauſe it is not ſo natural to man as food, and ſerves not for the nouriſhment of the body, but onely to keep off, or drive out diſeaſes: Alſo no ſtone muſt be cut, but man muſt rather indure torment and death. But ſetting aſide this ſuperſtitious doctrine of your *Author*, it is evident enough, and needs no proof, that Cancers, Fiſtula's, Wenns, Eating-*evils*, Madneſs, Fevers, Conſumptions, Rheumes, Pleuriſies, and numerous other diſeaſes, are not better cured then by Iſſues, or making of wounds; either by Lancets, Pen-knifes, Sciſſers, Raſors, Corroſives, Cauſticks, Leeches, or the like. And although your *Author* ſays, That *that Matter which proceeds from, or out of an Iſſue, is made in the lips of the wound, and not in the body; for it cannot poſsibly drain or draw out any moiſture, either from within or between*

between the skin and the fleſh, having no paſſages: Yet if this were ſo, how come Fiſtula's, Cancers, and the like diſeaſes, to have paſſages from within the body to the exterior parts, ſo, as to make a wound, out of which much ſharp and ſalt humor iſſues? which humor certainly is not made in the lips of the wound, but in the body: Alſo whence comes the humor that makes the Gout? For though the ſwelling and inflammation will ſometimes appear exteriouſly, yet after ſome time thoſe tumors and humors retire back into the body from whence they did flow; but he might as well ſay that Pit-falls or Sluces do not drain Land from a ſuperfluity of Water, as that Iſſues do not drain the body of ſuperfluous humors. Wherefore I am abſolutely of opinion, that the Practice of the Schools is the beſt and wiſeſt Practice, as well in making Iſſues, letting blood, Purging by Siege or Vomits, as any other means uſed by them; for by Iſſues I have ſeen many cured, when no other medicines would do any good with them; and letting blood, I am confident, hath reſcued more lives, then the Univerſal Medicine, could Chymiſts find it out, perchance would do. So alſo Clyſters and Vomits, skilfully applied, have done great benefits to the life of men; for every part and member hath its peculiar way to be purged and cleanſed; for example, Clyſters principally cleanſe the Guts, Purges the Stomack, Vomits the Cheſt, Sneezing the Head, Bleeding the Veins, and Iſſues drain the whole body of naughty humors: All which remedies, properly and timely uſed, keep the body from being choak'd with ſuperfluities. There are ſeveral other ways of cures beſides for ſeveral diſeaſes, but I leave thoſe to learned and skilful Phyſicians,

ſicians, who know beſt how and when to uſe them to the benefit and health of their Patients, although your *Author* finds much fault with them, and blames them for ſuffering men to die miſerably; but God has given power to Nature to make certain diſſolutions, although uncertain diſeaſes, and uncertain remedies. Neither hath ſhe in her power to give Immortal Life to particular Creatures, for this belongs to God alone, and therefore no Univerſal Medicine will keep out death, or prolong life further then its thread is ſpun, which I doubt is but a Chymæra, and an impoſsible thing, by reaſon there are not onely ſo many different varieties in ſeveral diſeaſes, but in one and the ſame diſeaſe, as no Univerſal remedy would do any good. But your *Author* is much pleaſed with Paradoxes, and Paradoxes are not certain Truths: Wherefore it is better, in my judgment, to follow the old approved and practiſed way of the Schools, grounded upon Experience and Reaſon, then his Paradoxical Opinions. To which Schools, as your *Author* is a great Enemy, ſo I am a great Friend, as well as,

MADAM,

Your Ladiſhips

humble Servant.

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XXXVI.

MADAM,

I Approve well of your *Authors* opinion[a], That *Drink ought not to be forbidden in Fevers*; but yet I would not allow ſo much as to drown and oppreſs the Patients life, but onely ſo much as to refreſh and moiſten him; and therefore the beſt way is to drink little and often. But as for Wine, which your *Author* commends in Fevers, I am utterly againſt it, unleſs the Fever proceed from a cold or crude cauſe, otherwiſe cooling Ptiſans are moſt beneficial to thoſe that are ſick of a continual Fever, which for the moſt part is a general Fever throughout the whole body, one part infecting the other, until they be all infected, like as in the Plague. And to let you know the proof of it; when I was once ſick beyond the Seas, I ſent for a Doctor of Phyſick who was an Iriſh-man: and hearing of ſome that knew him, and his practice, that he was not ſucceſsful in his Cures, but that his Patients moſt commonly died, I asked him what he uſed to preſcribe in ſuch or ſuch diſeaſes: where amongſt the reſt, as I remember, he told me, That he allowed his Patients to drink Wine in a Fever. I thought he was in a great error, and told him my opinion, that though Wine might be profitable, perhaps, to ſome few, yet for the moſt part it was very hurtful and deſtructive, alledging another famous

[a] Of Fevers, Ch. 12.

Phyſician in *France*, Dr. *Daviſon*, who uſed in continual Fevers, to preſcribe onely cooling Ptiſan, made of a little Barley, and a great quantity of Water, ſo thin as the Barley was hardly perceived, and a ſpoonfull of ſyrup of Limmon put into a quart of the ſaid Ptiſan; but in caſe of a Flux, he ordered ſome few ſeeds of Pomegranats to be put into it, and this cold Ptiſan was to be the Patients onely drink: Beſides, once in Twenty four hours he preſcribed a couple of potched Eggs, with a little Verjuice, and to let the Patient blood, if he was dry and hot; I mean dry exterioufly, as from ſweat; and that either often or ſeldom, according as occaſion was found: Alſo he preſcribed two grains of Laudanum every night, but neither to give the Patient meat nor drink two hours before and after: Which advice and Practice of the mentioned Phyſician concerning Fevers; with ſeveral others, I declared to this Iriſh Doctor, and he obſerving this rule, cured many, and ſo recovered his loſt eſteem and repute. But your *Author* being all for Wine, and againſt cooling drinks, or Julips, in hot Fevers, ſays, *That cooling means are more like to death, to ceſſation from motion, and to defect; but heat from moderate Wine is a mean like unto life.* To which I anſwer, firſt, That cold, or cooling things, are as active as hot or heating things; neither is death more cold then hot, nor life more hot then cold; for we ſee that Froſt is as active and ſtrong as burning heat; and Water, Air, and Earth, are as full of life, as Fire; and Vegetables, Minerals, and Elements, have life as well as Animals: But we, feeling a Man's fleſh cold when he is diſſolving from an Animal, think death is cold; and ſeeing he was hot before the ſame alteration,

ſay

ſay, Life is hot: Alſo finding an animal, when it is diſſolving, to be without external local Motion, we ſay it is dead; and when it hath as yet this local motion before its alteration, we call it alive; which certainly is not proper. Next I ſay, that a wiſe Man when his houſe is fired, will fling or ſquirt water upon it, to quench it, and take out all moveables leſt they ſhould increaſe the flame; likewiſe he will make vent for the flame to iſſue forth. But perchance your *Author* may ſay, that Fevers are not hot. Truly, in my opinion, he might ſay as well that Fire is cold. Again: he may ſay, That although the effect be hot, yet the cauſe is cold. I anſwer: That in ſome diſeaſes, the effects become ſo firmly rooted, and ſo powerfull, that they muſt be more look'd upon then the cauſe: for ſuch variety there is in Nature, that oftentimes, that which was now an effect, turns to be a cauſe, and again a cauſe an effect: For example; A cold cauſe often produces a hot effect, and this hot effect becomes again a cauſe of a cold effect: Which variation is not onely a trouble, but a great obſtruction to wiſe Phyſicians; for Nature hath more varieties in diſeaſes, then Phyſicians have remedies, And as for drink, if Fevers be neither hot, nor dry, nor require drink for want of moiſture; then I ſee no reaſon why drink ſhould be urged, and thoſe Phyſicians blamed that forbid it; for if thirſt proceed from an evil digeſtion, drink will rather weaken the ſtomack; for heat and drineſs draw ſoon away the drink in the ſtomack, and putting much into a weak ſtomack doth rather hurt then good. But if neceſsity re-

quire

quire it, then I approve rather of raw and crude Water, then of hot inflaming Wiue. And ſo taking my leave, I reſt,

MADAM,

Your faithful Friend

and humble Servant.

XXXVII.

MADAM,

IN your *Authors* Treatiſe of Fevers, I find one Chapter [a] whoſe Inſcription is, *A Perfect Curing of all Fevers*, wherein he declares the ſecrets of the Cures of Fevers, conſiſting all in Chymical Medicines. But conſidering, that if all Fevers could be cured by ſuch Medicines, then all Phyſicians would ſtrive to obtain them; I can hardly believe (by your *Authors* favour) that any ſuch perfect curing of all Fevers can be effected, but that your *Authors* preſcriptions, if they ſhould come to the tryal, might fail as well as any other. Likewiſe he mentions a Medicine of *Paracelſus*, named *Diacelteſſon*, or the *Coraline Secret*; which, he ſays, cures radically the Gout no leſs then Fevers: Which if ſo, I wonder why ſo many Great, Noble and Rich Perſons, groan ſo much under the pains of the Gout; certainly it is not for want of coſt to have them prepared, nor for want of an ingenious and experienced Chymiſt; for this age doth not want skilful workmen in that

[a] *Ch.* 14.

that Art, nor worthy and wiſe Phyſicians, which if they knew ſuch ſoveraign medicines, would ſoon apply them to their Patients; but I ſuppoſe that they finding their effects to be leſs then the coſt and labour beſtowed upon them, forbear to uſe them. Moreover, he mentions[b] another remedy for moſt diſeaſes, *by him* call'd *Driff*, prepared alſo by the Art of Chymiſtry; but I believe all thoſe remedies will not ſo often cure, as fail of cure, like as the Sympathetical Powder; for if there were ſuch ſoveraign medicines that did never fail of a ſucceſsful effect, certainly men being curious, inquiſitive, and ſearching, would never leave till they had found them out. Alſo amongſt Vegetables, the herb *Chameleon* and *Arſmart* are in great requeſt with your *Author*; For, ſays he, *they by their touching alone, do preſently take away cruel diſeaſes, or at leaſtwiſe eaſe them.* Which if ſo, I wonder that there is not more uſe made of them, and they held in greater eſteem then they are; Alſo that your *Author* doth not declare the vertue of them, and the manner and way how, and in what diſeaſes to uſe them, for the benefit of his neighbour, to which end, he ſays, all his labours and actions are directed: But again, your *Author* confirms, as an Eye-witneſs, *That the bone of the arm of a Toad preſently has taken away the Tooth-ach at the firſt co-touching.* Which remedy, if it was conſtant, few, in my opinion, would ſuffer ſuch cruel pains, and cauſe their teeth to be drawn out, eſpecially if ſound. Likewiſe of the mineral *Electrum or Amber* of *Paracelſus*, he affirms[a] to have ſeen, that *hung about the neck, it has freed thoſe that were perſecuted by unclean ſpirits*, and that many ſimples have done

[b] In the *Ch.* named *Butler.*

[a] Ch. Of the manner of entrance of things darted into the body.

done the like effects; but ſurely, *Madam*, I cannot be perſwaded that the Devil ſhould be put away ſo eaſily; for he being a Spirit, will not be chaſed by corporeal means, but by ſpiritual, which is Faith, and Prayer; and the cure of diſpoſſeſsing the Devil belongs to Divines, and not to Natural Philoſopers or Phyſicians. But though exterior remedies, as Amulets, Pomanders, and the like, may perform ſometimes ſuch effects as to cure or preſerve from ſome diſeaſes, yet they are not ordinary and conſtant, but meerly by chance. But there are more falſe remedies then true ones, and if one remedy chance to work ſucceſsfully with one diſtempered perſon, it may fail of its ſucceſs applyed to others in the ſame kind of diſtemper; nay, it may cure perhaps one and the ſame perſon of a diſtemper once, and in the return of the ſame diſeaſe effect little or nothing; witneſs thoſe remedies that are applyed in Agues, Toothaches, and the like, eſpecially Amulets; for one and the ſame diſeaſe in ſeveral perſons, or in one and the ſame perſon at ſeveral times, may vary and change ſo often, and proceed from ſo different cauſes, and be of ſo different tempers, and have ſuch different motions, as one and the ſame medicine can do no good: And what would the skill of Phyſicians be, if one remedy ſhould cure all diſeaſes? Why ſhould they take ſo much pains in ſtudying the various cauſes, motions, and tempers of diſeaſes, if one medicine had a general power over all? Nay, for what uſe ſhould God have created ſuch a number of different ſimples, Vegetables, and Minerals, if one could do all the buſineſs? Laſtly, your *Author* rehearſes[a] ſome ſtrange examples of Child-bearing Women, who having ſeen terrible and cruel ſights,

[a] *Ch.* Of things injected into the body.

ſights, as Executions of Malefactors, and diſmembring of their bodies, have brought forth monſtrous births, without heads, hands, arms, leggs, *&c.* according to the objects they had ſeen. I muſt confeſs, *Madam*, that all Creatures are not always formed perfect; for Nature works irregularly ſometimes, wherefore a Child may be born defective in ſome member or other, or have double members inſtead of one, and ſo may other animal Creatures; but this is nevertheleſs natural, although irregular to us: but to have a Child born perfect in the womb, and the loſt member to be taken off there, and ſo brought forth defective, as your *Author* mentions, cannot enter my belief; neither can your *Author* himſelf give any reaſon, but he makes onely a bare relation of it; for certainly, if it was true, that the member was chopt, rent or pluckt off from the whole body of the Child, it could not have been done without a violent ſhock or motion of the Mother, which I am confident would never have been able to endure it; for ſuch a great alteration in her body, would of neceſsity, beſides the death of the Child, have cauſed a total diſſolution of her own animal parts, by altering the natural animal motions: But, as I ſaid above, thoſe births are cauſed by irregular motions, and are not frequent and ordinary; for if upon every ſtrange ſight, or cruel object, a Child-bearing-woman ſhould produce ſuch effects, Monſters would be more frequent then they are. In ſhort, Nature loves variety, and this is the cauſe of all ſtrange and unuſual natural effects; and ſo leaving Nature to her will and pleaſure, my onely delight and pleaſure is to be,

MADAM,

faithful Friend, and humble Servant.

MA-

XXXVIII.

MADAM,

YOur *Author* reproving the Schools, that they forbid Salt to ſome diſeaſed perſons, as pernicious to their health: *Good God,* ſays he [a], *how unſavoury are the Schools, and how unſavoury do they bid us to be!* But I ſuppoſe the Schools do not abſolutely forbid all diſeaſed perſons to abſtein from ſalt, but onely not to uſe it exceſsively, or too frequently; for experience proves, that ſalt meats have not onely increaſed, but cauſed diſeaſes; as the Stone, the Gout, Sciatica, Fiſtula's, Cancers, ſore Eyes, ſore Throats, and the like: I do not ſay, that thoſe diſeaſes are always bred with the exceſs of ſalt diets; for diſeaſes of one and the ſame kind, may be bred variouſly; but this hath been obſerved, that whoſoever is affected with ſuch diſeaſes, ſhall after a ſalt meal find himſelf in more pain then before; wherefore a conſtant or common ſalt diet cannot but be hurtful. Neither are thoſe perſons that feed much on ſalt meats, or uſe ſtrong drinks, take number for number, ſo healthful or long-lived, as thoſe that are temperate and abſtaining. Next, your *Author* [a] bewails *The ſhameful ſimplicity of thoſe, that give their Patients Leaf-Gold, Pearls, and bruiſed or powder'd prètious Stones, as Cordials, in fainting fits, and other diſtempers: For,* ſays he, *they may be diſſolved, but not altered; wherefore they cannot produce any powerful effect to the health of the Patient.* Truly, *Madam,*

Of the diſeaſe of the Stone, *c.* 3.

Ch. Of the reaſon or conſideration of diet.

Madam, I am not of his mind; for were it that thoſe remedies or cordials could not be tranſchanged, yet their vertues may nevertheleſs be very beneficial to the ſick: For example; a man that is aſſaulted by enemies, or by chance is fallen into a deep Pit, or is ready to be ſtrangled, and in all not able to help himſelf, yet by the help of another man, may be reſcued and freed from his danger, and from death, uſing ſuch means as are able to releaſe him, which either by drawing his Sword againſt his enemies, or by throwing a rope down into the Pit, and haling him out, or by cutting the rope by which he hung, may ſave him, and yet neither the man, nor any of his Inſtruments, as Sword, Rope, Knife, and the like, need to be tranſchanged. The like may be ſaid of the aforementioned medicines or remedies; which if they be not tranſchangeable, yet they may nevertheleſs do ſuch operations, as by their natural active qualities and proprieties to over-power the irregular motions in the natural parts of the body of the Patient; for many diſeaſes proceed more from irregular motions then irregular parts: and although there is no motion without matter, yet one and the ſame matter may have divers and various changes of motions, and moving parts will either oppoſe or aſſiſt each other without tranſchanging. And truly, *Madam*, I wonder that your *Author* doth condemn ſuch Cordials made of Leaf-gold, Pearls, powdered precious Stones, or the like, and yet verily believe, that Amber, Saphires, Emeraulds, Beads, Bracelets, *&c.* outwardly applied or worn, can cure more then when inwardly taken; ſurely, if this be ſo, they cure more by Faith, then by Reaſon. But it ſeems your *Author* regulates the actions

of Nature to the artificial actions of his Furnace, which although ſometimes they produce wonderful effects, yet not ſuch as Nature doth; for if they cure one, they commonly kill ten; nay, the beſt of their Medicine is ſo dangerous, as it ought not to be applied but in deſperate caſes: Wherefore Wiſe Phyſicians muſt needs be Provident and Cautious when they uſe them. And ſo leaving them, I reſt,

MADAM,

Your faithful Friend

and humble Servant.

XXXIX.

MADAM,

In the Plague-grave, *ch.* 17.

I Will not diſpute your *Authors* opinion concerning the Plague of Men, which he ſays, *doth not infect Beaſts, neither doth the plague of Beaſts infect Men*; but rather believe it to be ſo: for I have obſerved, that Beaſts infect onely each other, to wit, thoſe of their own kind, as Men do infect other Men. For example: the Plague amongſt Horſes continues in their own kind, and ſo doth the Plague amongſt Sheep; and for any thing we know, there may be a plague amongſt Vegetables, as well as amongſt Animals, and they may not onely infect each other, but alſo thoſe Animals that do feed on thoſe infectious Vegetables: ſo that Infections may be cauſed ſeveral ways; either by inbreathing and attracting

tracting or ſucking in the Poyſon of the Plague, or by eating and converting it into the ſubſtance of the body; for ſome kinds of poyſon are ſo powerful, as to work onely by way of inbreathing. Alſo ſome ſorts of Air may be full of infection, and infect many Men, Beaſts, Birds, Vegetables, and the like; for Infections are variouſly produced, Internally as well as Externally, amongſt ſeveral particular Creatures; for as the Plague may be made internally, or within the body of a particular Creature, without any exterior infection entring from without into the body, ſo an external Infection again may enter many ſeveral ways into the body. And thus there be many contagious diſeaſes cauſed meerly by the internal motions of the body, as by fright, terror, conceit, fancy, imagination, and the like, and many by the taking of poyſonous matter from without into the body; but all are made by the natural motions or actions of animate matter, by which all is made that is in Nature, and nothing is new, as *Solomon* ſays; but what is thought or ſeems to be new, is onely the variation of the Motions of this old Matter, which is Nature. And this is the reaſon that not every Age, Nation, or Creature, has always the like diſeaſes; for as all the actions of Nature vary, ſo alſo do diſeaſes. But to ſpeak of the Plague, although I am of opinion, that the Plague of Beaſts doth not infect Men, unleſs they be eaten; nor the plague of Men, Beaſts; yet Magiſtrates do wiſely in ſome places, that in the beginning of the plague of Men, they command Dogs and Cats to be kill'd, by reaſon, as your *Author* ſaith, *The skins and fleſh of Brutes may be defiled with our Plague, and they may be peſtiferous contagions unto us.* I will add one

thing

thing more, which doth concern the Poyſon of Meaſels, whereof your *Author* is ſaying [a], That *it is onely proper to humane kind.* What kind of Meaſles he means, I know not; but certainly Hogs are often affected with that diſeaſe, as is vulgarly known; but whether they be different diſeaſes in their kinds, and proceed from different motions, I will let others inquire. And ſo I reſt,

[a] *Ch.* Call'd, *The Lunar Tribute.*

MADAM,

Your faithful Friend

and Servant.

XL.

MADAM,

COncerning the diſeaſe of the Stone, your *Author* ſeems to be of an opinion, That the ſtone in the Bladder, and the ſtone in the Kidnies, are not made after one and the ſame manne: For, ſays he [a], *The Bladder and the ſame Urine in number procreates a duelech of another condition, then that which is made in the Kidney.* And truly, *Madam*, it may be ſo; for there are ſeveral ways or modes in irregularities, as well as regularities, and not every kind is alike, no not every Particular, but there is ſome difference between them: Wherefore, it may very well be, that the corporeal motions that make the ſtone in the Kidneys, are not juſt alike to thoſe that make the ſtone in the Bladder;

[a] Of the Stone, *ch* 6. See the *ch.* called, *A Numero-Critical Paradox of ſupplies.*

and

and as each ſort of ſtone is different, ſo their particular cauſes ought to be different; but this is to be obſerved, that generally all diſeaſes which produce hardneſs, are made by contracting, condenſing and retenting motions, and therefore the remedies of them muſt be dilating, rarifying and diſſolving. Next your *Author* ſays, *The Stone is not bred by heat, but heat is rather an effect of the ſtone; neither is a certain muſcilage, or a ſlimy, ſnivelly Phlegme the cauſe or matter of the ſtone, but the ſtone is the cauſe of the phlegme.* But, in my judgment, it ſeems more probable, that a ſlimy matter is more proper for a ſtone to be made of, then that a ſtone ſhould make ſlime, except it be in its diſſolution; that is, when the ſtone, as in its generation or production it did change from a ſlimy or liquid ſubſtance to a ſtone by condenſing and contracting motions, doth, by dilating and rarifying motions, diſſolve again into ſuch a liquid and ſlimy body: I will not ſay always, to wit, that the ſtone muſt needs be reſolved into a ſlimy matter, but oftentimes it may be ſo. Neither can I abſolutely affirm that either heat or cold onely is the cauſe of a ſtone; for ſome may be produced by hot, and ſome by cold contractions and denſations, there being as many ſeveral ſorts of ſtones as there are of other Creatures: But this is to be well noted, that as ſome ſorts of hot contractions do make ſtones, ſo ſome ſorts of hot dilations do diſſolve them: The like of cold contractions and dilations. Again: your *Author* ſpeaking of the womb wherein the ſtone is made; *Every generated thing or being,* ſays he, *muſt of neceſsity have a certain place or womb where it is produced; for there muſt needs be places wherein things may be made before they are bred.*

I anſwer: As there is not any body without place, nor any place without body, ſo the womb is not the place of the body generated, neither before nor after its generation, no more then a man can be ſaid to be in a room when he is not there, but every body carries its place along with it. Moreover, concerning the voiding of bloody Urine, which happens ſometimes in the diſeaſe of the Stone, my opinion is, That it doth not always proceed from the Stone, but many times from the breaking or voluntary opening of ſome Veins. But as for the cure of the diſeaſe of the Stone your *Author*[a] is pleaſed to affirm, *That no diſeaſe is incurable*, and ſo neither the diſeaſe of the Stone; *For he himſelf has cured many of the Stone to which they had been obedient for ſome years.* Indeed, *Madam*, I fear his words are more cheerful then effectual; however it may be poſsible, if the Kidneys be no ways impaired, or the Bladder hurt; but if there be ſome ſuch imperfection in either or both, then it is as much, in my opinion, as to ſay, Man can do more then Nature doth: Neither can I believe, that then any of your *Author's* Chymical preparations, as *Aroph*, *Ludus*, *Alkaheſt*, and the like, if they were to be had, would do any good, no nor *Daucus*, or wild Carrot-ſeed, if the diſeaſe be as yet curable, will prove an effectual remedy for it, although your *Author* is pleaſed to relate an example of a man, to whom it did much good; for I can affirm the contrary by other the like Examples, that it never did any good to thoſe that uſed it; nor the liquor of the Birch-tree, whoſe vertue and efficacy I do not believe to be ſo great as your *Author* deſcribes[a]: But for the ſtoppage of Urine, Marſh-mallow and oyl

of

of Almonds, which he deſpiſes, I approve to be good, and better then any of his Unknown, Chymical Secrets; for thoſe Chymical Medicines, as he himſelf confeſſes, are hard to be had, eſpecially *Alkaheſt*, which is onely to be obtained by a Particular favour from Heaven, and is rather a ſupernatural Gift, then a natural remedy. But your *Author* doth wiſely, to commend ſuch remedies as can never, or with great difficulty be obtained, and then to ſay that no diſeaſe is incurable. And ſo leaving him to his unknown ſecrets, and thoſe to them that will uſe them, I am reſolved to adhere to the Practice of the Schools, which I am confident will be more beneficial to the health of,

MADAM,

Your real and faithful

Friend and Servant.

XLI.

MADAM,

YOur *Author* ſpeaking of the *Gout*, and of that kind of Gout which is called *Hereditary*, ſays, *It conſiſts immediately in the Spirit of Life.* Firſt, as for that which is called an Hereditary Diſeaſe, propagated from Parents upon their Children; my opinion is, That it is nothing elſe but the ſame actions of the animate matter, producing the ſame effect in the Child as they did in the Parent: For example; the ſame motions which

which made the Gout in the Parent, may make the ſame diſeaſe in the Child; but every Child has not his Parents diſeaſes, and many Children have ſuch diſeaſes as their Parents never had; neither is any diſeaſe tied to a particular Family by Generation, but they proceed from irregular motions, and are generally in all Mankind; and therefore properly there is no ſuch thing as an hereditary propagation of diſeaſes; for one and the ſame kind of diſeaſe may be made in different perſons, never a kin to one another, by the *like* motions; but becauſe Children have ſuch a neer relation to their Parents by Generation, if they chance to have the ſame diſeaſes with their Parents, men are apt to conclude it comes by inheritance; but we may as well ſay, that all diſeaſes are hereditary; for there is not any diſeaſe in Nature but is produced by the actions of Nature's ſubſtance; and if we receive life and all our bodily ſubſtance by Generation from our Parents, we may be ſaid to receive diſeaſes too; for diſeaſes are inherent in the matter or ſubſtance of Nature, which every Creature is a part of, and are real beings made by the corporeal motions of the animate matter, although irregular to us; for as this matter moves, ſo is Life or Death, Sickneſs or Health, and all natural effects; and we conſiſting of the ſame natural matter, are naturally ſubject as well to diſeaſes as to health, according as the Matter moves. Thus all diſeaſes are hereditary in Nature; nay, the Scripture it ſelf confirms it, informing us, that diſeaſes, as well as death, are by an hereditary propagation derived from *Adam* upon all Poſterity. But as for the Gout, your *Authors* doctrine is[a], *That Life is not a body, nor proper to a body, nor of the off-ſpring of corporeal*

[a] Of the diſeaſe of the Stone. c. 9.

poreal Proprieties[b], but a *meer No-thing*; and that *the Spirit of Life*[c] *is a real being, to wit, the arterial blood reſolved by the Ferment of the heart into ſalt air, and enlightned by life*, and that the Gout doth immediately conſiſt in this ſpirit of life. All which how it doth agree, I cannot conceive; for that a real being ſhould be enlightned by Nothing, and be a ſpirit of Nothing, is not imaginable, nor how the Gout ſhould inhabit in the ſpirit of life; for then it would follow, that a Child, as ſoon as it is brought forth into the world, would be troubled with the Gout, if it be as natural to him as life, or have its habitation in the Spirit of Life. Alſo your *Author* is ſpeaking of *an Appoplexy in the head, which takes away all ſenſe and motion.* But ſurely, in my opinion, it is impoſsible that all ſenſe and motion ſhould be out of the head; onely that ſenſe and motion, which is proper to the head, and to the nature of that Creature, is altered to ſome other ſenſitive and rational motions, which are proper to ſome other figure; for there is no part or particle of matter that has not motion and ſenſe. I pray conſider, *Madam*, is there any thing in Nature that is without motion? Perchance you will ſay, Minerals; but that is proved otherwiſe; as for example, by the ſympathetical motion between the Loadſtone and Iron, and between the Needle and the North, as alſo by the operation of Mercury, and ſeveral others: Wherefore there is no doubt, but all kinds, ſorts and particulars of Creatures have their natural motions, although they are not all viſible to us, but not ſuch motions as are made by Gas, or Blas, or Ideas, *&c.* but corporeal ſenſitive and rational motions, which are the actions of Natural Matter. You

[b] Of the ſubject of inhering of diſeaſes in the point of life.
[c] Of the Spirit of Life.

may ſay, Some are of opinion, that Sympathy and Antipathy are not Corporeal motions. Truly, whoſoever ſays ſo, ſpeaks no reaſon; for Sympathy and Antipathy are nothing elſe but the actions of bodies, and are made in bodies; the Sympathy betwixt Iron and the Loadſtone is in bodies; the Sympathy between the Needle and the North is in bodies; the Sympathy of the Magnetick powder is in bodies. The truth is, there is no motion without a body, nor no body without motion. Neither doth Sympathy and Antipathy work at diſtance by the power of Immaterial Spirits, or rays, iſſuing out of their bodies, but by agreeable or diſagreeable corporeal motions; for if the motions be agreeable, there is Sympathy; if diſagreeable, there is Antipathy; and if they be equally found in two bodies, then there is a mutual Sympathy or Antipathy; but if in one body onely, and not in the other, there is but Sympathy or Antipathy on one ſide, or in one Creature. Laſtly, concerning *ſwoonings or fainting fits*, your *Authors* opinion is, that they *proceed from the ſtomack*: Which I can hardly believe; for many will ſwoon upon the ſight of ſome object, others at a ſound, or report, others at the ſmell of ſome diſagreeable odour, others at the taſte of ſome or other thing that is not agreeable to their nature, and ſo forth: alſo ſome will ſwoon at the apprehenſion or conceit of ſomething, and ſome by a diſorder or irregularity of motions in exterior parts. Wherefore, my opinion is, that ſwoonings may proceed from any part of the body, and not onely from the ſtomack. But, *Madam*, I being no Phyſicianeſs may perhaps be in an error, and therefore I

will

will leave this diſcourſe to thoſe that are thorowly learned and practiſed in this Art, and reſt ſatisfied that I am,

MADAM,

Your Ladiſhips

humble Servant.

XLII.

MADAM,

YOur *Author* [a] is inquiring whether ſome cures of diſeaſes may be effected by bare co-touchings; and I am of his opinion, they may; for co-touchings of ſome exterior objects may cauſe alterations of ſome particular motions in ſome particular parts of matter, without either transferring their own motions into thoſe parts, (for that this is impoſsible, I have heretofore declared) or without any corporeal departing from their own parts of matter into them, and alterations may be produced both in the motions and figures of the affected parts: but theſe cures are not ſo frequent as thoſe that are made by the entring of medicines into the diſeaſed parts, and either expel the malignant matter, or rectifie the irregular and diſordered motions, or ſtrengthen the weak, or reduce the ſtraying, or work any other ways according to the nature and propriety of their own ſubſtance, and the diſpoſition of the diſtempered parts: Nevertheleſs, thoſe cures which are performed exteriouſly

[a] In the *ch.* call'd *Butler.*

teriouſly, as to heal inward affects by an outwad bare co-touching, are all made by natural motions in natural ſubſtances, and not by *Non*-beings, ſubſtanceleſs Ideas, or ſpiritual Rays; for thoſe that will cure diſeaſes by *Non*-beings, will effect little or nothing; for a diſeaſe is corporeal or material, and ſo muſt the remedies be, there being no cure made but by a conflict of the remedy with the diſeaſe; and certainly, if a *non*-being fight againſt a being, or a corporeal diſeaſe, I doubt it will do no great effect; for the being will be too ſtrong for the *non*-being: Wherefore my conſtant opinion is, that all cures whatſover, are perfected by the power of corporeal motions, working upon the affected parts either interiouſly or exteriouſly, either by applying external remedies to external wounds, or by curing internal diſtempers, either by medicines taken internally, or by bare external co-touchings. And ſuch a remedy, I ſuppoſe, has been that which your *Author* ſpeaks of, *viz.* a ſtone of a certain Iriſh-man, which by a meer external contact hath cured all kinds of diſeaſes, either by touching outwardly the affected parts, or by licking it but with the tip of the Tongue, if the diſeaſe was Internal: But if the vertue of the Stone was ſuch, as your *Author* deſcribes, certainly, what man ſoever he was that poſſeſſed ſuch a jewel, I ſay, he was rather of the nature of the Devil, then of man, that would not divulge it to the general benefit of all mankind; and I wonder much, that your *Author*, who otherwiſe pretends ſuch extraordinary Devotion, Piety, and Religiouſneſs, as alſo Charity, *viz.* that all his works he has written, are for the benefit of his neighbour, and to detect the errors of the Schools meerly for the good of man,

man, doth yet plead his cauſe, ſaying, That *ſecrets, as they are moſt difficultly prepared, ſo they ought to remain in ſecret forever in the poſſeſsion of the Privy Councel,* what Privy Counſels he means, I know not; but certainly ſome are more difficult to be ſpoken to, or any thing to be obtained from, then the preparation of a Phyſical Arcanum. However, a general good or benefit ought not to be concealed or kept in privy Councels, but to be divulged and publickly made known, that all ſorts of People, of what condition, degree, or Nation ſoever, might partake of the general bleſsing and bounty of God. But, *Madam,* you may be ſure, that many, who pretend to know Phyſical ſecrets, moſt commonly know the leaſt, as being for the moſt part of the rank of them that deceive the ſimple with ſtrange tales which exceed truth; and to make themſelves more authentical, they uſe to rail at others, and to condemn their skill, onely to magnifie their own: I ſay, many, *Madam,* as I have obſerved, are of that nature, eſpecially thoſe, that have but a ſuperficial knowledg in the Art of Phyſick; for thoſe that are thorowly learned, and ſufficiently practiſed in it, ſcorn to do the like; which I wiſh may proſper and thrive by their skill. And ſo I reſt,

MADAM,

Your Ladiſhips

humble Servant.

XLIII.

MADAM,

Ch. 61. called, *The Preface.*

YOur *Author* is pleaſed to relate a ſtory of one that died ſuddenly, and being diſſected, there was not the leaſt ſign of decay or diſorder found in his body. But I cannot add to thoſe that wonder, when no ſign of diſtemper is found in a man's body after he is dead; becauſe I do not believe, that the ſubtilleſt, learnedſt, and moſt practiſed Anatomiſt, can exactly tell all the Interior Government or motions, or can find out all obſcure and inviſible paſſages in a man's body; for concerning the motions, they are all altered in death, or rather in the diſſolution of the animal figure; and although the exterior animal figure or ſhape doth not alter ſo ſoon, yet the animal motions may alter in a moment of time; which ſudden alteration may cauſe a ſudden death, and ſo the motions being inviſible, the cauſe of death cannot be perceived; for no body can find that which is not to be found, to wit, animal motions in a dead man; for Nature hath altered theſe motions from being animal motions to ſome other kind of motions, ſhe being as various in diſſolutions, as in productions, indeed ſo various, that her ways cannot be traced or known thorowly and perfecty, but onely by piecemeals, as the ſaying is, that is, but partly: Wherefore man can onely know that which is viſible, or ſubject to his ſenſes; and yet our ſenſes do not always inform us truly, but the alterations of groſſer parts are more

more eaſily known, then the alterations of ſubtil corporeal motions, either in general, or in particular; neither are the inviſible paſſages to be known in a dead Carcaſs, much leſs in a living body. But, I pray, miſtake me not, when I ſay, that the animal motions are not ſubject to our exterior ſenſes; for I do not mean all exterior animal motions, nor all interior animal motions; for though you do ſee no interior motion in an animal body, yet you may feel ſome, as the motion of the Heart, the motion of the Pulſe, the motion of the Lungs, and the like; but the moſt part of the interior animal motions are not ſubject to our exterior ſenſes; nay, no man, he may be as obſerving as he will, can poſsibly know by his exterior ſenſes all the ſeveral and various interior motions in his own body, nor all the exterior motions of his exterior parts: and thus it remains ſtill, that neither the ſubtilleſt motions and parts of matter, nor the obſcure paſſages in ſeveral Creatures, can be known but by ſeveral parts; for what one part is ignorant of, another part is knowing, and what one part is knowing, another part is ignorant thereof; ſo that unleſs all the Parts of Infinite Matter were joyned into one Creature, there can never be in one particular Creature a perfect knowledg of all things in Nature. Wherefore I ſhall never aſpire to any ſuch knowledg, but be content with that little particular knowledg, Nature has been pleaſed to give me, the chief of which is, that I know my ſelf, and eſpecially that I am,

MADAM,

Your conſtant Friend,
and faithful Servant.

MA-

XLIV.

MADAM,

I Perceive you are deſirous to know the cauſe, *Why a man is more weak at the latter end of a diſeaſe then at the beginning, and is a longer time recovering health, then looſing health*; as alſo *the reaſon of relapſes and intermiſſions?* Firſt, as for weakneſs and ſtrength, my opinion is, they are cauſed by the regular and irregular motions in ſeveral parts, each ſtriving to overpower the other in their conflict; and when a man recovers from a diſeaſe, although the regular motions have conquered the irregular, and ſubdued them to their obedience, yet they are not ſo quite obedient as they ought, which cauſes weakneſs: Neither do the regular motions uſe ſo much force in Peace, as in War; for though animate matter cannot loſe force, yet it doth not always uſe force; neither can the parts of Nature act beyond their natural power, but they do act within their natural power; neither do they commonly act to the utmoſt of their power. And as for Health, why it is ſooner loſt then recovered; I anſwer, That it is eaſier to make diſorders then to rectifie them: as for example, in a Common-wealth, the ruines of War are not ſo ſuddenly repaired, as made. But concerning Relapſes and Intermiſſions of diſeaſes, Intermiſſions are like truces or ceſſations from War for a time; and Relapſes are like new ſtirs or tumults of Rebellion; for Rebels are not ſo apt to ſettle in peace

peace as to renew the war upon ſlight occaſions; and if the regular motions of the body be ſtronger, they reduce them again unto obedience. But diſeaſes are occaſioned many ſeveral ways; for ſome are made by a home Rebellion, and others by forreign enemies, and ſome by natural and regular diſſolutions, and their cures are as different; but the chief Magiſtrates or Governors of the animal body, which are the regular motions of the parts of the body, want moſt commonly the aſsiſtance of forreign Parts, which are Medicines, Diets, and the like; and if there be factions amongſt theſe chief Magiſtrates, or motions of the parts of the body, then the whole body ſuffers a ruine. But ſince there would be no variety in Nature, nor no difference between Natures ſeveral parts or Creatures, if her actions were never different, but always agreeing and conſtant, a war or rebellion in Nature cannot be avoided: But, miſtake me not, for I do not mean a war or rebellion in the nature or ſubſtance of Matter, but between the ſeveral parts of Matter, which are the ſeveral Creatures, and their ſeveral Motions; for Matter being always one and the ſame in its nature, has nothing to war withal; and ſurely it will not quarrel with its own Nature. Next you deſire to know, that if Nature be in a Perpetual motion, *Whence comes a duration of ſome things, and a Tiredneſs, Wearineſs, Sluggiſhneſs, or Faintneſs?* I anſwer, firſt, That in ſome bodies, the Retentive motions are ſtronger then the diſſolving motions; as for example, Gold, and Quick-ſilver or Mercury; the ſeparating and diſſolving motions of Fire have onely power to melt and rarifie them for a time, but cannot alter their nature: ſo a Hammer,

or ſuch like inſtrument, when uſed, may beat Gold, and make it thin as a Cobweb, or as duſt, but cannot alter its interior nature: But yet this doth not prove it to be either without motion, or to be altogether unalterable, and not ſubject to any diſſolution; but onely that its retentive motions are too ſtrong for the diſſolving motions of the Fire, which by force work upon the Gold; and we might as well ſay, that Sand, or an Earthen Veſſel, or Glaſs, or Stone, or any thing elſe, is unalterable, and will laſt eternally, if not diſturbed. But ſome of Natures actions are as induſtrious to keep their figures, as others are to diſſolve, or alter them; and therefore Retentive motions are more ſtrong and active in ſome figures, then diſſolving motions are in others, or producing motions in other Figures. Next, as for Tiredneſs, or Faintneſs of motions, there is no ſuch thing as tiredneſs or faintneſs in Nature, for Nature cannot be tired, nor grow faint, or ſick, nor be pained, nor die, nor be any ways defective; for all this is onely cauſed through the change and variety of the corporeal motions of Nature, and her ſeveral parts; neither do irregular motions prove any defect in Nature, but a prudence in Natures actions, in making varieties and alterations of Figures; for without ſuch motions or actions, there could not be ſuch varieties and alterations in Nature as there are: neither is ſlackneſs of ſome motions a defect, for Nature is too wiſe to uſe her utmoſt force in her ordinary works; and though Nature is infinite, yet it is not neceſſary ſhe ſhould uſe an infinite force and power in any particular act. Laſtly, you deſire my opinion, *Whether there be motion in a dead animal Creature.* To which, I anſwer: I have declared

clared heretofore, that there is no ſuch thing as death in Nature, but what is commonly named death, is but an alteration or change of corporeal motions, and the death of an animal is nothing elſe but the diſſolving motions of its figure; for when a man is dying, the motions which did formerly work to the conſiſtence of *his* figure do now work to the diſſolution of his figure, and to the production of ſome other figures, changing and transforming every part thereof; but though the figure of that dead animal is diſſolved, yet the parts of that diſſolved figure remain ſtill in Nature although they be infinitely changed, and will do ſo eternally, as long as Nature laſts by the Will of God; for nothing can be loſt or annihilated in Nature. And *this is all, Madam,* that I can anſwer to your queſtions, wherein, I hope, I have obeyed your commands, according to the duty of,

MADAM,

Your faithful Friend

and humble Servant.

XLV.

MADAM,

I Have thus far diſcharged my duty, that according to your commands, I have given you my judgment of the works of thoſe four famous Philoſophers of our age, which you did ſend me to peruſe, and have withal

withal made reflexions upon ſome of their opinions in Natural Philoſophy, eſpecially thoſe, wherein I did find them diſſent from the Ground and Principles of my own Philoſophy. And ſince by your leave I am now publiſhing all thoſe Letters which I have hitherto written to you concerning thoſe aforeſaid Authors, and their Works, I am confident I ſhall not eſcape the cenſures of their followers; But, I ſhall deſire them, that they will be pleaſed to do me this Juſtice, and to examine firſt my opinions well, without any partiality or wilful miſinterpretation of my ſence, before they paſs their cenſure: Next, I deſire them to conſider, That I have no skill in School-learning, and therefore for want of terms of Art may eaſily chance to ſlip, or at leaſt, not expreſs my opinions ſo clearly as my readers expected; However, I have done my endeavour, and to my ſenſe and reaſon they ſeem clear and plain enough, eſpecially as I have expreſſed them in thoſe Letters I have ſent you; for concerning my other Work, called *Philoſophical Opinions*, I muſt confeſs, that it might have been done more exactly and perſpicuouſly, had I been better skilled in ſuch words and expreſſions as are uſual in the Schools of Philoſophers; and therefore, if I be but capable to learn names and terms of Art, (although I find my ſelf very untoward to learn, and do deſpair of proving a Scholar) I will yet endeavour to rectifie that work, and make it more intelligible; for my greateſt ambition is to expreſs my conceptions ſo, that my Readers may underſtand them: For which I would not ſpare any labour or pains, but be as induſtrious as thoſe that gain their living by their work; and I pray to God, that Nature may give me a capacity

city to do it. But as for thoſe that will cenſure my works out of ſpite and malice; rather then according to juſtice, let them do their worſt; for if God do but bleſs them, I need not to fear the power of Nature, much leſs of a part of Nature, as Man. Nay, if I have but your Ladiſhips approbation, it will ſatisfie me; for *I know* you are ſo wiſe and juſt in your judgment, that I may ſafely rely upon it: For which I ſhall conſtantly and unfeignedly remain as long as I live,

MADAM,

Your Ladiſhips moſt faithful Friend

and humble Servant.

SECT. IV.

I.

MADAM,

I Perceive, you take great delight in the ſtudy of Natural Philoſophy, ſince you have not onely ſent me ſome Authors to peruſe, and give my judgment of their opinions, but are very ſtudious your ſelf in the reading of Philoſophical Works: and truly, I think you cannot ſpend your time more honourably, profitably, and delightfully, then in the ſtudy of Nature, as to conſider how Variouſly, Curiouſly, and Wiſely, ſhe acts in her Creatures; for if the particular knowledg of a man's ſelf be commendable, much more is the knowledg of the general actions of Nature, which doth lead us to the knowledg of our ſelves. The truth is, by the help of Philoſophy our Minds are raiſed above our ſelves, into the knowledg of the Cauſes of all natural effects. But

leaving

leaving the commending of this noble ſtudy, you are pleaſed to deſire my opinion of a very difficult and intricate argument in Natural Philoſophy, to wit, of Generation, or Natural Production. I muſt beg leave to tell you, firſt, that ſome (though fooliſhly) believe, it is not fit for Women to argue upon ſo ſubtil a Myſtery: Next, there have been ſo many learned and experienced Philoſophers, Phyſicians, and Anatomiſts, which have treated of this ſubject, that it might be thought a great preſumption for me, to argue with them, having neither the learning nor experience by practice which they had: Laſtly, There are ſo many ſeveral ways and manners of Productions in Nature, as it is impoſsible for a ſingle Creature to know them all: For there are Infinite variations made by ſelf-motion in Infinite Matter, producing ſeveral Figures, which are ſeveral Creatures in that ſame Matter. But you would fain know, how Nature, which is Infinite Matter, acts by ſelf-motion? Truly, *Madam*, you may as well ask any one part of your body, how every other part of your body acts, as to ask me, who am but a ſmall part of Infinite Matter, how Nature works. But yet, I cannot ſay, that Nature is ſo obſcure, as her Creatures are utterly ignorant; for as there are two of the outward ſenſitive organs in animal bodies, which are more intelligible then the reſt, to wit, the Ear, and the Eye; ſo in Infinite Matter, which is the body of Nature, there are two parts, which are more underſtanding or knowing then the reſt, to wit, the Rational and Senſitive part of Infinite Matter; for though it be true, That Nature, by ſelf-diviſion, made by ſelf-motion into ſelf-figures, which are ſelf-parts, cauſes a ſelf-obſcurity to each

each part, motion, and figure; nevertheleſs, Nature being infinitely wiſe and knowing, its infinite natural wiſdom and knowledg is divided amongſt thoſe infinite parts of the infinite body: and the two moſt intelligible parts, as I ſaid, are the ſenſitive and rational parts in Nature, which are divided, being infinite, into every Figure or Creature; I cannot ſay equally divided, no more, then I can ſay, all creatures are of equal ſhapes, ſizes, properties, ſtrengths, quantities, qualities, conſtitutions, ſemblances, appetites, paſsions, capacities, forms, natures, and the like; for Nature delights in variety, as humane ſenſe and reaſon may well perceive: for ſeldom any two creatures are juſt alike, although of one kind or ſort, but every creature doth vary more or leſs. Wherefore it is not probable, that the production or generation of all or moſt Creatures, ſhould be after one and the ſame manner or way, for elſe all Creatures would be juſt alike without any difference. But this is to be obſerved, that though Nature delights in variety, yet ſhe doth not delight in confuſion, but, as it is the propriety of Nature to work variouſly, ſo ſhe works alſo wiſely; which is the reaſon, that the rational and ſenſitive parts of Nature, which are the deſigning and architectonical parts, keep the ſpecies of every kind of Creatures by the way of Tranſlation in Generation, or natural Production; for whatſoever is transferred, works according to the nature of that figure or figures from whence it was transferred, But miſtake me not; for I do not mean always according to their exterior Figure, but according to their interior Nature; for different motions in one and the ſame parts of matter, make diſ-

ferent

ferent figures, wherefore much more in ſeveral parts of matter and changes of motion; But, as I ſaid, Tranſlation is the chief means to keep or maintain the ſpecies of every kind of Creatures, which Tranſlation in natural production or generation, is of the pureſt and ſubtileſt ſubſtances, to wit, the ſenſitive and rational, which are the deſigning and architectonical parts of Nature. You may ask me, *Madam*, what this wiſe and ingenious Matter is. I anſwer: It is ſo pure, ſubtil, and ſelf-active, as our humane ſhares of ſenſe and reaſon cannot readily or perfectly perceive it; for by that little part of knowledg that a humane creature hath, it may more readily perceive the ſtrong action then the purer ſubſtance; for the ſtrongeſt action of the pureſt ſubſtance is more perceivable then the matter or ſubſtance it ſelf; which is the cauſe, that moſt men are apt to believe the motion, and to deny the matter, by reaſon of its ſubtilty; for ſurely the ſenſitive and rational matter is ſo pure and ſubtil, as not to be expreſſed by humane ſenſe and reaſon. As for the rational matter, it is ſo pure, fine, and ſubtil, that it may be as far beyond lucent matter, as lucent matter is beyond groſs vapours, or thick clouds; and the ſenſitive matter ſeems not much leſs pure: alſo there is very pure inanimate matter, but not ſubtil and active of it ſelf; for as there are degrees in the animate, ſo there are alſo degrees in the inanimate matter; ſo that the pureſt degree of inanimate matter comes next to the animate, not in motion, but in the purity of its own degree; for it cannot change its nature ſo, as to become animate, yet it may be ſo pure in its own nature, as not to be perceptible by our groſſer ſenſes.

But concerning the two degrees of animate Matter, to wit, the ſenſitive and rational, I ſay that the ſenſitive is much more acute then Vitriol, Aqua-fortis, Fire, or the like; and the rational much more ſubtil and active then Quickſilver, or Light, ſo as I cannot find a compariſon fit to expreſs them, onely that this ſenſitive and rational ſelf-moving Matter is the life and ſoul of Nature; But by reaſon this Matter is not ſubject to our groſs ſenſes, although our ſenſes are ſubject to it, as being made, ſubſiſting and acting through the power of its actions, we are not apt to believe it, no more then a ſimple Country-wench will believe, that Air is a ſubſtance, if ſhe neither hear, ſee, ſmell, taſte, or touch it, although Air touches and ſurrounds her: But yet the effects of this animate matter prove that there is ſuch a matter; onely, as I ſaid before, this ſelf-moving matter cauſing a ſelf-diviſion as well as a general action, is the cauſe of a ſelf-obſcurity, which obſcurity cauſes doubts, diſputes, and inconſtancies in humane opinions, although not ſo much obſcurity, as to make all Creatures blindfold, for ſurely there is no Creature but perceives more or leſs. But to conclude, The Rational degree of Matter is the moſt intelligible, and the wiſeſt part of Nature, and the Senſitive is the moſt laborious and provident part in Nature, both which are the Creators of all Creatures in Infinite Matter; and if you intend to know more of this Rational and Senſitive Matter, you may conſult my Book of Philoſophy, to which I refer you. And ſo taking my leave for the preſent, I reſt,

MADAM,

Your Faithful Friend and Servant.

MA-

II.

MADAM,

I Underſtand by your laſt, that you have read the Book of that moſt learned and famous Phyſician and Anatomiſt, Dr. *Harvey*, which treats of Generation; and in the reading of it, you have mark'd ſeveral ſcruples, which you have framed into ſeveral queſtions concerning that ſubject, to which you deſire my anſwer. Truly, *Madam*, I am loth to imbarque my ſelf in this difficult argument, not onely for the reaſons I have given you heretofore, but alſo that I do not find my ſelf able enough to give you ſuch a ſatisfactory anſwer as perhaps you do expect. But ſince your Commands are ſo powerful with me, that I can hardly reſiſt them, and your Nature ſo good that you eaſily pardon any thing that is amiſs, I will venture upon it according to the ſtrength of my Natural Reaſon, and endeavour to give you my opinion as well and as clearly as I can. Your firſt queſtion is; *Whether the action of one or more producers be the onely cauſe of Natural Production or Generation, without imparting or transferring any of their own ſubſtance or Matter.* I anſwer: The ſole co-action of the Producers may make a change of exterior forms or figures, but not produce another Creature; for if there were not ſubſtance or matter, as well as action, both transferred together, there would not be new Creatures made out of old Matter, but every production would require new Matter, which is impoſsible, if

there

there be but one Matter, and that infinite; and certainly, humane ſenſe and reaſon may well perceive, that there can be but one Matter, for ſeveral kinds of Matter would make a confuſion; and thus if new Creatures were made onely by ſubſtanceleſs motion, it would not onely be an infinite trouble to Nature, to create ſomething out of nothing perpetually, but, as I ſaid, it would make a confuſion amongſt all Nature's works, which are her ſeveral Parts or Creatures. But by reaſon there is but one Matter, which is Infinite and Eternal, and this Matter has ſelf-motion in it, both Matter, and Motion muſt of neceſsity tranſmigrate, or be tranſferred together without any ſeparation, as being but one thing, to wit, Corporeal Motion. 'Tis true, one part of animate or ſelf-moving Matter, may without Tranſlation move; or rather occaſion other parts to move; but one Creature cannot naturally produce another without the transferring of its corporeal motions. But it is well to be obſerved, that there is great difference between the actions of Nature; for all actions are not generating, but ſome are patterning, and ſome transforming, and the like; and as for the tranſforming action, that may be without tranſlation, as being nothing elſe but a change of motions in one and the ſame part or parts of Matter, to wit, when the ſame parts of Matter do change into ſeveral figures, and return into the ſame figures again. Alſo the action of Patterning is without Tranſlation; for to pattern out, is nothing elſe but to imitate, and to make a figure in its own ſubſtance or parts of Matter like another figure. But in generation every producer doth transfer both Matter and Motion, that is, Corporeal Motion into

into the produced; and if there be more producers then one, they *all* do contribute to the produced; and if one Creature produces many Creatures, thoſe many Creatures do partake more or leſs of their producer. But you may ſay, If the producer transfers its own Matter, or rather its own corporeal motions into the produced, *many* productions will ſoon diſſolve the producer, and he will become a ſacrifice to his off-ſpring. I anſwer; That *doth* not follow: for as one or more Creatures contribute to one or more other Creatures, ſo other Creatures do contribute to them, although not after one and the ſame manner or way, but after divers manners or ways; but all manners and ways muſt be by tranſlation to repair and aſsiſt; for no Creature can ſubſiſt alone and of *it ſelf*, but all Creatures traffick and commerce from and to each other, and muſt of neceſſity do ſo, ſince they are all parts of the ſame Matter: Neither can Motion ſubſiſt without Matter, nor quit Matter, nor act without Matter, no more, then an Artificer can work without materials, and without ſelf-motion Matter would be dead and uſeleſs; Wherefore Matter and Motion muſt upon neceſsity not onely be inſeparable, but be one body, to wit, corporeal motion; which motion by dividing and compoſing its ſeveral parts, and acting variouſly, is the cauſe of all Production, Generation, Metamorphoſing, or any other thing that is done in Nature. But if, according to your *Author*, the ſole action be the cauſe of Generation without transferring of ſubſtance, then Matter is uſeleſs, and of none or little effect; which, in my opinion, is not probable.

Your ſecond queſtion is, *Whether the Production or*

Generation of animals is as the Conceptions of the Brain, which the Learned ſay are Immaterial? I anſwer: The Conceptions of the Brain, in my opinion, are not Immaterial, but Corporeal; for though the corporeal motions of the brain, or the matter of its conceptions, is inviſible to humane Creatures, and that when the brain is diſſected, there is no ſuch matter found, yet that doth not prove, that there is no Matter, becauſe it is not ſo groſs a ſubſtance as to be perceptible by our exterior ſenſes: Neither will your *Authors* example hold, that as a builder erects a houſe according to his conception in the brain, the ſame happens in all other natural productions or generations; for, in my opinion, the houſe is materially made in the brain, which is the conception of the builder, although not of ſuch groſs materials, as Stone, Brick, Wood, and the like, yet of ſuch matter as is the Rational Matter, that is, the houſe when it is conceived in the brain, is made by the rational corporeal figurative motions of their own ſubſtance or degree of Matter; But if all Animals ſhould be produced by meer fancies, and a Man and a Woman ſhould beget by fancying themſelves together in copulation, then the produced would be a true Platonick Child; But if a Woman being from her Huſband ſhould be ſo got with Child, the queſtion is, whether the Husband would own the Child; and if amorous Lovers (which are more contagious for appetite and fancy then Married perſons) ſhould produce Children by Immaterial contagions, there would be more Children then Parents to own them.

Your third queſtion is, *Whether Animals may not be produced, as many Diſeaſes are, by contagion?* I anſwer: Although

Although contagions may be made at a diſtance, by perception; yet thoſe diſeaſes are not begotten by immaterial motions, but by the rational and ſenſitive corporeal motions, which work ſuch diſeaſes in the body of a Creature, by the aſſociation of parts, like as the ſame diſeaſe is made in another body: Neither are diſeaſes always produced after one and the ſame manner, but after divers manners; whereas animals are produced as animals, that is, after one natural and proper way; for although all the effects in particular be not alike, yet the general way or manner to produce thoſe effects is the ſame: As for example; there is no other way to produce a fruitful Egg, but by a Cock and a Hen; But a Contagious diſeaſe, as the ſmall-Pox, or the like, may be produced by the way of Surfeits or by Conceit, which may cauſe the ſenſitive corporeal parts, through the irregular motions of the rational corporeal parts, to work and produce ſuch a diſeaſe, or any other ways. But neither a diſeaſe, nor no creature elſe can be produced without matter, by ſubſtanceleſs motion; for whereſoever is motion, there is alſo matter, matter and motion being but one thing.

Your fourth queſtion is, *Whether an Animal Creature is perfectly ſhaped or formed at the firſt Conception?* I anſwer: If the Creature be compoſed of many and different parts, my opinions is, it cannot be. You may ſay, That if it hath not all his parts produced at once, there will be required many acts of generation to beget or produce every part, otherwiſe the producers would not be the Parents of the produced in whole, but in part. I anſwer: The Producer is the deſigner, architect, and founder of the whole Creature produced; for

for the ſenſitive and rational corporeal motions, which are tranſferred from the producer or producers, joyn to build the produced like to the producer in ſpecie, but the transferred parts may be inviſible and inſenſible to humane Creatures, both through their purity and little quantity, until the produced is framed to ſome viſible degree; for a ſtately building may proceed from a ſmall beginning, neither can humane ſenſe tell what manner of building is deſigned at the firſt foundation. But you may ſay, That many Eggs may be made by one act of the producers, to wit, the Cock and the Hen, and thoſe many Eggs may be laid at ſeveral times, as alſo hatched at ſeveral times, and become Chickens at ſeveral times. I anſwer; It may well and eaſily be ſo: for the rational and ſenſitive parts or corporeal motions which were transferred in one act, deſigned many produced through that one act; for thoſe transferred corporeal motions, although they have not a ſufficient quantity of themſelves to make all the produced in their perfect ſhapes at once, yet they are the chief deſigner, architect and founder of all that are to be produced; for the corporeal motions which are transferred, joyn with thoſe they are transferred to, and being aſſociates, work to one deſign, the ſenſitive being the architect, the rational the deſigner, which together with the inanimate parts of matter, can never want materials, neither can the materials want labourers; for the degrees of matter are inſeparable, and do make but one body or ſubſtance. Again you may ſay, That ſome parts of Matter may produce another Creature not like to the producer in its ſpecies, as for example, Monſters. I anſwer, That is poſsible to be done, but yet it is not uſual;

uſual; for Monſters are not commonly born, but thoſe corporeal motions which dwell in one ſpecies, work according to the nature of the ſame ſpecies; and when the parts of Matter are transferred from Creature to Creature, that is, are ſeparated from ſome parts, and joyned to other pars of the ſame ſpecies, and the *ſame* nature; thoſe transferred parts of matter, although inviſible in quantity, by reaſon of their purity and ſubtilty, begin the work of the produced according to its natural ſpecies, and the labourers in other parts of matter work to the ſame end; juſt as it is in the artificial building of a houſe, where the houſe is firſt deſigned by the Architect, or Maſter, and then the labourers work not after their own fancy, (elſe it would not be the *ſame houſe that was deſigned*, nor any uniformity in it) but according to the architects or ſurveyors deſign; ſo thoſe parts of matter or corporeal motions that are tranſferred from the producer, are like the architect, but the labourers or workmen are the aſsiſting and adjoyning parts of matter. But you will ſay, How comes it, that many creatures may be made by one or two? I anſwer: As one owner or two partners may be the cauſe of many buildings, ſo few or more transferred rational and ſenſitive corporeal motions may make and produce as many creatures as they can get materials and labourers; for if they get one, they get the other, by reaſon the degrees of matter, *viz.* animate and inanimate, are inſeparably mixt, and make but one body or ſubſtance; and the proof of it is, that all animals are not conſtant in the number of their off-ſpring, but ſometimes produce more, and ſometimes fewer, and ſometimes their off-ſpring is leſs, and ſometimes larger, according to the

quantity of matter. Again you may ſay, That in ſome Creatures there is no paſſage to receive the transferred matter into the place of the architecture. I anſwer: That all paſſages are not viſible to humane ſenſe; and ſome humane Creatures have not a ſufficient humane reaſon to conceive, that moſt of Natures works are not ſo groſs as to be ſubject to their exterior ſenſes; but as for ſuch parts and paſſages, whether exterior or interior, viſible or inviſible, as alſo for copulation, conception, formation, nouriſhment, and the *like* in Generation, I leave you to Phyſicians and Anatomiſts. And to conclude this queſtion, we may obſerve, *that not any animal* Creatures ſhape diſſolveth in one inſtant of time, but by degrees; why ſhould we believe then, that Animals are generated *or produced in their perfect* ſhape in one inſtant of time, and by one act of Nature? But ſenſe and reaſon knows by obſervation, that an animal Creature requires more time to be generated, then to be diſſolved, like as an houſe is ſooner and with leſs pains pull'd down, then built up.

Your Fifth queſtion is, *Whether Animals are not generated by the way of Metamorphoſing?* To which I anſwer, That it is not poſsible that a third Creature can be made without tranſlation of corporeal motions; and ſince Metamorphoſing is onely a change of motions in the ſame parts of Matter, without any tranſlation of corporeal motions, no animal Creature can be produced or generated by the way of Metamorphoſing.

Your Sixth queſtion is, *Whether a whole may be made out of a part?* I anſwer: There is no whole in Nature, except you will call Nature her ſelf a whole; for all Creatures are but parts of Infinite Matter.

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Your Seventh queſtion is, *Whether all Animals, as alſo Vegetables, are made or generated by the way of Eggs?* I have ſaid heretofore, That it is not probable, that different ſorts, nay, different kinds of Creatures, ſhould all have but one manner or way of production; for why ſhould not Nature make different ways of productions, as well as different Creatures? And as for Vegetables, if all their Seeds be likened unto Eggs, then Eggs may very well be likened to Seeds; which if ſo, then a Peas-cod is the Hen, and the Peas in the Cod is the cluſter of Eggs: the like of ears of Corn. And thoſe animals that produce but one creature or ſeed at a time, may be like the kernel of a Nut, when the ſhell is broke, the creature comes forth. But how this will agree with your *Author*, who ſays, that the creature in the ſhell muſt make its own paſſage, I cannot tell; for if the Nut be not broken by ſome external means or occaſion, the kernel is not like to get forth. And as for humane Eggs, I know not what to anſwer; for it is ſaid, that the firſt Woman was made of a mans ribb; but whether that ribb was an egg, I cannot tell. And why may not Minerals and Elements be produced by the way of Eggs as well as Vegetables and Animals? Nay, why may not the whole World be likened unto an Egg? Which if ſo, the two Poles are the two ends of the Egg; and for the Elements, the Yolk is the Fire, the White, the Water; the Film, the Air; and the Shell it ſelf will very well ſerve for the Earth: But then it muſt firſt be broken, and pounded into one lump or ſolid maſs, and ſo ſwim or ſink into the midſt of the liquid parts, as to the Center; and as for the ſeveral fætuſes in this great Egg, they are the ſeveral Creatures

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in it. Or it might be ſaid, that the Chaos was an Egg, and the Univerſe, the Chicken. But leaving this ſimilizing, it is like, that ſome ſtudious Men may by long ſtudy upon one part of the body, conceive and believe that all other parts are like that one part; like as thoſe that have gazed long upon the Sun, all they ſee for a time, are Suns to them; or like as thoſe which having heard much of Hobgoblins, all they ſee are Hobgoblins, their fancies making ſuch things. But, *Madam*, to make a concluſion alſo of *this* queſtion, I repeat what I ſaid before, *viz.* that all Creatures have not one way of production; and as they have not all one way of production, ſo they have neither one inſtant of time either for perfection or diſſolution, but their perfection and diſſolution is made by degrees.

Your Eighth queſtion is, *Whether it may not be, that the ſenſitive and rational corporeal motions in an Egg do pattern out the figure of the Hen and Cock, while the Hen ſits upon the Egg, and ſo bring forth Chickens by the way of patterning?* I anſwer: The action of patterning, is not the action of Generation; for as I ſaid heretofore, the actions of Nature are different, and Generation muſt needs be performed by the way of tranſlation, which tranſlation *is not* required in the action of Patterning; but according as the Producers are, which transfer their own matter into the produced, ſo is the produced concerning its ſpecies; which is plainly proved by common examples; for if Pheaſants, or Turky, or Gooſe-eggs, be laid under an ordinary Hen, or an ordinary Hens-egg be laid under a Pheaſant, Turky, or Gooſe, the Chickens of thoſe Eggs will never be of any other ſpecies then of thoſe

that

that produced the Egg; for an ordinary Hen, if ſhe ſit upon Pheaſants, Turky, or Gooſe-eggs, doth not hatch Chickens of her own ſpecies, but the Chickens will be of the ſpecies either of the Pheaſant, or Turky, or Gooſe, which did at firſt produce the Egg; which proves, that in Generation, or Natural production, there is not onely required the action of the Producers, but alſo a Transferring of ſome of their own parts to form the produced. But you may ſay, What doth the ſitting Hen contribute then to the production of the Chicken? I anſwer: The ſitting Hen doth onely aſsiſt the Egg in the production of the Chicken, as the Ground doth the Seed.

Your Ninth queſtion is, *Concerning the Soul of a particular Animal Creature, as whether it be wholly of it ſelf, and ſubſiſts wholly in and by it ſelf?* But you muſt give me leave firſt to ask you what Soul you mean, whether the Divine, or the Natural Soul, for there is great difference betwixt them, although not the leaſt that ever I heard, rightly examined and diſtinguiſhed; and if you mean the Divine Soul, I ſhall deſire you to excuſe me, for that belongs to Divines, and not to Natural Philoſophers; neither am I ſo preſumptuous as to intrench upon their ſacred order. But as for the Natural Soul, the Learned have divided it into three parts, to wit, the Vegetative, Senſitive, and Rational Soul; and according to theſe three Souls, made three kinds of lives, as the Vegetative, Senſitive, and Rational Life. But they might as well ſay, there are infinite bodies, lives, and ſouls, as three; for in Nature there is but one life, ſoul, and body, conſiſting all of one Matter, which is corporeal Nature. But yet by reaſon this life

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and ſoul is material, it is divided into numerous parts, which make numerous lives and ſouls in every particular Creature; for each particular part of the rational ſelf-moving Matter, is each particular ſoul in each particular Creature, but all thoſe parts conſidered in general, make but one ſoul of Nature; and as this ſelf-moving Rational Matter hath power to unite its parts, ſo it hath ability or power to divide its united parts. And thus the rational ſoul of every particular Creature is compoſed of parts, (I mean parts of a material ſubſtance; for whatſoever is ſubſtanceleſs and incorporeal, belongs not to Nature, but is Supernatural;) for by reaſon the Infinite and Onely matter is by ſelf-motion divided into ſelf-parts, not any Creature can have a ſoul without parts; neither can the ſouls of Creatures ſubſiſt without commerce of other rational parts, no more then one body can ſubſiſt without the aſſiſtance of other bodies; for all parts belong to one body, which is Nature: nay, if any thing could ſubſiſt of it ſelf, it were a God, and not a Creature: Wherefore not any Creature can challenge a ſoul abſolutely to himſelf, unleſs Man, who hath a divine ſoul, which no other Creature hath. But that which makes ſo many confuſions and diſputes amongſt learned men is, that they conceive, firſt, there is no rational ſoul but onely in man; next, that this rational ſoul in every man is individable. But if the rational ſoul is material, as certainly to all ſenſe and reaſon it is, then it muſt not onely be in all material Creatures, but be dividable too; for all that is material or corporeal hath parts, and is dividable, and therefore there is no ſuch thing in any one Creature as one intire ſoul; nay, we might as well ſay, there

there is but one Creature in Nature, as ſay, there is but one individable natural ſoul in one Creature.

Your Tenth queſtion is, *Whether Souls are producible, or can be produced?* I anſwer: in my opinion, they are producible, by reaſon all parts in Nature are ſo. But miſtake me not; for I do not mean that any one part is produced out of Nothing, or out of new matter; but one Creature is produced by another, by the dividing and uniting, joyning and disjoyning of the ſeveral parts of Matter; and not by ſubſtanceleſs Motion out of new Matter. And becauſe there is not any thing in Nature, that has an abſolute ſubſiſtence of it ſelf, each Creature is a producer, as well as a produced, in ſome kind or other; for no part of Nature can ſubſiſt ſingle, and without reference and aſsiſtance of each other, or elſe every ſingle part would not onely be a whole of it ſelf, but be as a God without controle; and though one part is not another part, yet one part belongs to another part, and all parts to one whole, and that whole to all the parts, which whole is one corporeal Nature. And thus, as I ſaid before, productions of one or more creatures, by one or more producers, without matter, meerly by immaterial motions, are impoſsible, to wit, that ſomething ſhould be made or produced out of nothing; for if this were ſo, there would conſequently be an annihilation or turning into nothing, and thoſe Creatures, which produce others by the way of immaterial motions, would rather be as a God, then a part of Nature, or Natural Matter. Beſides, it would be an endleſs labour, and more trouble to create particular Creatures out of nothing, then a World at once; whereas now it is eaſie for Nature to create

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by production and tranſmigration; and therefore it is not probable, that any one Creature hath a particular life, ſoul, or body to it ſelf, as ſubſiſting by it ſelf, and as it were preciſed from the reſt, having its own ſubſiſtence without the aſsiſtance of any other; nor is it probable, that any one Creature is new, for all that is, was, and ſhall be, till the Omnipotent God diſpoſes Nature otherwiſe.

As for the reſt of your queſtions, as whether the Sun be the cauſe of all motions, and of all *natural* productions; and whether the life of a Creature be onely in the blood, or whether it have its beginning from the blood, or whether the blood be the chief architect of an animal, or be the ſeat of the ſoul; ſenſe and reaſon, in my opinion, doth plainly contradict them; for concerning the blood, if it were the ſeat of the *Soul, then* in the circulation of the blood, if the *Soul* hath a brain, it would become very dizzie by *its* turning round; but perchance ſome may think the *Soul* to be a Sun, and the Blood the Zodiack, and the body the Globe of the Earth, which the Soul ſurrounds in ſuch time as the Blood is flowing about. And ſo leaving thoſe ſimilizing Fancies, I'le add no more, but repeat what I ſaid *in* the beginning, *viz.* that I rely upon the goodneſs of your Nature, from which I hope for pardon, if I have not ſo exactly and ſolidly anſwered your deſire; for the argument of this diſcourſe being ſo difficult, may eaſily lead me into an error, which your better judgment will ſoon correct; and in ſo doing you will add to thoſe favours for which I am already,

MADAM,

Your Ladiſhips moſt obliged Friend and humble Servant.

MA-

III

MADAM,

YOu thought verily, I had miſtaken my ſelf in my laſt, concerning the Rational Souls of every particular Creature, becauſe I ſaid, all Creatures had numerous *Souls*; and not onely ſo, but every particular Creature had numerous Souls. Truly, *Madam*, I did not miſtake my ſelf, for I am of the ſame opinion ſtill; for though there is but one *Soul in infinite* Nature, yet that ſoul being dividable into parts, every part is a ſoul in every ſingle creature, were the parts no bigger in quantity then an atome. But you ask whether Nature hath Infinite ſouls? I anſwer: That Infinite Nature is but one Infinite body, divided into Infinite parts, which we call Creatures; and therefore it may as well be ſaid, That Nature is compoſed of Infinite Creatures or Parts, as ſhe is divided into Infinite Creatures or Parts; for Nature being Material, is dividable, and compoſable. The ſame may be ſaid of Nature's Soul, which is the Rational part of the onely infinite Matter, as alſo of Nature's Life, which is the ſenſitive part of the onely Infinite ſelf-moving Matter; and of the Inanimate part of the onely Infinite Matter, which I call the body for diſtinction ſake, as having no ſelf-motion in its own nature, for Infinite Material Nature hath an Infinite Material Soul, Life, and Body. But, *Madam*, I deſire you to obſerve what I ſaid already; *viz.*

that the parts of Nature are as apt to divide, as to unite; for the chief actions of Nature are to divide, and to unite; which diviſion is the cauſe, that it may well be ſaid, every particular Creature hath numerous ſouls; for every part of rational Matter is a particular Soul, and every part of the ſenſitive Matter is a particular Life; all which, mixed with the Inanimate Matter, though they be Infinite in parts, yet they make but one Infinite whole, which is Infinite Nature; and thus the Infinite diviſion into Infinite parts is the cauſe, that every particular Creature hath numerous Souls, and the tranſmigration of parts from, and to parts, is the reaſon, that not any Creature can challenge a ſingle ſoul, or ſouls to it ſelf; the ſame for life. But moſt men are unwilling to believe, that Rational Souls are material, and that this rational Matter is dividable in Nature; when as humane ſenſe and reaſon may well perceive, that Nature is active, and full of variety; and action, and variety cannot be without motion, diviſion, and compoſition: but the reaſon that variety, diviſion, and compoſition, runs not into confuſion, is, that firſt there is but one kind of Matter; next, that the diviſion and compoſition of parts doth ballance each other into a union in the whole. But, to conclude, thoſe Creatures which have their rational parts moſt united, are the wiſeſt; and thoſe that have their rational parts moſt divided, are the wittieſt; and thoſe that have much of this rational matter, are much knowing; and thoſe which have leſs of this rational matter, are leſs knowing; and there is no Creature that hath not ſome; for like as all the parts of a humane body are indued with life, and ſoul; ſo are all the parts of Infinite Nature;

and

and though ſome parts of Matter are not animate in themſelves, yet there is no part that is not mixt with the animate matter; ſo that all parts of Nature are moving, and moved. And thus, hoping I have cleared my ſelf in this point, to your better underſtanding, I take my leave, and reſt,

MADAM,

Your faithful Friend

and Servant.

IV.

MADAM,

IN the Works of that moſt famous Philoſopher and Mathematician of our age *Gal.* which you thought worth my reading, I find, he diſcourſes much of upwards and downwards, backwards and forwards; but to tell you really, I do not underſtand what he means by thoſe words, for, in my opinion, there is properly no ſuch thing as upwards, downwards, backwards, or forwards in Nature, for all this is nothing elſe but natural corporeal motions, to which in reſpect of ſome particulars we do attribute ſuch or ſuch names; for if we conceive a Circle, I pray where is upwards and downwards, backwards and forwards? Certainly, it is, in my opinion, juſt like that, they name Reſt, Place, Space, Time, *&c.* when as Nature her ſelf knows of no ſuch things, but all theſe are onely the

the ſeveral and various motions of the onely Matter. You will ſay, How can Reſt be a motion? I anſwer: Reſt is a word which expreſſes rather mans ignorance then his knowledg; for when he ſees, that a particular Creature has not any external local motion perceptible by his ſight, he ſays it reſteth, and this reſt he calls a ceſſation from motion, when as yet there is no ſuch thing as ceſſation from motion in Nature; for motion is the action of natural Matter, and its Nature is to move perpetually; ſo that it is more probable for motion to be annihilated, then to ceaſe. But you may ſay, It is a ceſſation from ſome particular motion. I anſwer: You may rather call it an alteration of a particular motion, then a ceſſation; for though a particular motion doth not move *in that ſame manner as it did before*, nevertheleſs it *is* ſtill there, and not onely there, but ſtill moving; onely it is not moving after the ſame manner as it did move heretofore, but has changed from ſuch a kind of motion to another kind of motion, and being ſtill moving it cannot be ſaid to ceaſe: Wherefore what is commonly called ceſſation from motion, is onely a change of ſome particular motion, and is a miſtake of change for reſt. Next, I find in the ſame *Author* a long diſcourſe of circular and ſtrait motions; to wit, *That they are ſimple motions, and that all others are compoſed out of them, and are mixt motions; Alſo, That the Circular Motion is perfect, and the Right imperfect; and that all the parts of the world, if moveable of their own nature, it is impoſsible, that their motions ſhould be Right, or any other then Circular: That a Circular motion is never to be gotten naturally, without a preceding right motion: That a Right motion cannot naturally*

naturally be perpetual: That a Right motion is impoſſible in the World well ordered: and the like. Firſt, I cannot conceive why natural Matter ſhould uſe the Circle-figure more then any other in the motions of her Creatures; for Nature, which is Infinite Matter, is not bound to one particular motion, or to move in a Circle more then any other figure, but ſhe moves more variouſly then any one part of hers can conceive; Wherefore it is not requiſite that the natural motions of natural bodies ſhould be onely Circular. Next, I do not underſtand, why a Circular Motion cannot be gotten naturally without a precedent right motion; for, in my opinion, corporeal motions may be round or circular, without being or moving ſtraight before; and if a ſtraight line doth make a circle, then an imperfect figure makes a perfect; but, in my opinion, a circle may as well make a ſtraight line, as a ſtrait line a circle; except it be like a Gordian knot, that it cannot be diſſolved, or that Nature may make ſome corporeal motions as conſtant as ſhe makes others inconſtant, for her motions are not alike in continuance and alteration. And as for right motion, that naturally it cannot be perpetual; my opinion is, that it cannot be, if Nature be finite; but if Nature be infinite, it may be: But the circular motion is more proper for a finite, then an infinite, becauſe a circle-figure is perfect and circumſcribed, and a ſtraight line is infinite, or at leaſt producible in infinite; and there may be other worlds in infinite Nature, beſides theſe round Globes perceptible by our ſight, which may have other figures; for though it be proper for Globes or Spherical bodies to move round, yet that doth not prove, that Infinite Matter moves

round, or that all worlds muſt be of a Globous figure; for there may be as different Worlds, as other Creatures. He ſays, That a Right motion is impoſſible in the World well ordered; But I cannot conceive a Right motion to be leſs orderly then a Circular in Nature, except it be in ſome Particulars; but oftentimes that, which is well ordered in ſome caſes, ſeems to ſome mens underſtandings and perceptions ill ordered in other caſes; for man, as a part, moſt commonly conſiders but the Particulars, not the Generals, like as every one in a Commonwealth conſiders more himſelf and his Family, then the Publick. Laſtly, Concerning the ſimplicity of Motions, as that onely circular and ſtraight motions are ſimple motions, becauſe they are made by ſimple Lines; I know not what they mean by ſimple Lines; for the ſame Lines which make ſtraight and circular figures, may make as well other figures as thoſe; but, in my opinion, all motions may be called ſimple, in regard of their own nature; for they are nothing elſe but the ſenſitive and rational part of Matter, which in its own nature is pure, and ſimple, and moves according to the Nature of each Figure, either ſwiftly or ſlowly, or in this or that ſort of motion; but the moſt ſimple, pureſt and ſubtilleſt part is the rational part of matter, which though it be mixed with the ſenſitive and inanimate in one body, yet it can and doth move figuratively in its own matter, without the help or aſsiſtance of any other. But I deſire you to remember, *Madam*, that in the compoſitions and diviſions of the parts of Nature, there is as much unity and agreement as there is diſcord and diſagreement; for in Infinite, there is no ſuch thing, as moſt, and leaſt; neither is there

any

any ſuch thing as more perfect, or leſs perfect in Matter. And as for Irregularities, properly there is none in Nature, for Nature is Regular; but that, which Man (who is but a ſmall part of Nature, and therefore but partly knowing) names Irregularities, or Imperfections, is onely a change and alteration of motions; for a part can know the variety of motions in Nature no more, then Finite can know Infinite, or the bare exterior ſhape and figure of a mans body can know the whole body, or the head can know the mind; for Infinite natural knowledg is corporeal; and being corporeal, it is dividable; and being dividable, it cannot be confined to one part onely; for there is no ſuch thing as an abſolute determination or ſubſiſtence in parts without relation or dependance upon one another. And ſince Matter is Infinite, and acts wiſely, and all for the beſt, it may be as well for the beſt of Nature, when parts are divided antipathetically, as when they they are united ſympathetically: Alſo Matter being Infinite, it cannot be perfect, neither can a part be called perfect, as being a part. But miſtake me not, *Madam*; for when I ſay, there is no perfection in Nature, as I do in my *Philoſophical Opinions**, I mean by Perfection, a finiteneſs, abſoluteneſs, or compleatneſs of figure; and in this ſenſe I ſay Nature has no perfection by reaſon it is Infinite; but yet I do not deny, but that there is a perfection in the nature or eſſence of Infinite Matter; for Matter is perfect Matter; that is, pure and ſimple in its own ſubſtance or nature, as meer Matter, without any mixture or addition of ſome thing that is not Matter, or that is

* between

between Matter and no Matter; and material motions are perfect motions although Infinite: juſt as a line may be called a perfect line, although it be endleſs, and Gold, or other Mettal, may be called perfect Gold, or perfect Metal, although it be but a part. And thus it may be ſaid of Infinite Nature, or Infinite Matter, without any contradiction, that it *is* both perfect, and not perfect; perfect in its nature or ſubſtance, not perfect in its exterior figure. But you may ſay, If Infinite Matter be *not* perfect, it is imperfect, and what *is* imperfect, wants ſomething. I anſwer, That doth not follow: for we cannot ſay, that what is not perfect, muſt of neceſsity be imperfect, becauſe there is ſomething elſe, which it may be, to wit, Infinite; for as *imperfection is beneath* perfection, ſo perfection is beneath Infinite; and though Infinite Matter be not perfect in its figure, yet it is not imperfect, but Infinite; for Perfection and Imperfection belongs onely to Particulars, and not to Infinite. And thus much for the preſent. I conclude, and reſt,

MADAM,

Your Ladiſhips

moſt obliged Friend

and humble Servant.

V.

MADAM,

THe *Author*, mentioned in my former Letter, ſays, *That Quietneſs is the degree of Infinite ſlowneſs, and that a moveable body paſsing from quietneſs, paſſes through all the degrees of ſlowneſs without ſtaying in any.* But I cannot conceive that all the Parts of Matter ſhould be neceſsitated to move by degrees; for though there be degrees in Nature, yet Nature doth not in all her actions move by degrees. You may ſay, for example, from one to twenty, there are eighteen degrees between One, and Twenty; and all theſe degrees are included in the laſt degree, which is twenty. I anſwer; That may be: but yet there is no progreſs made through all thoſe degrees; for when a body doth move ſtrong at one time, and the next time after moves weak; I cannot conceive how any degrees ſhould really be made between. You may ſay, By Imagination. But this Imagination of degrees, is like the conception of Space and Place, when as yet there is no ſuch thing as Place or Space by it ſelf; for all is but one body, and Motion is the action of this ſame body, which is corporeal Nature; and becauſe a particular body can and doth move after various manners, according to the change of its corporeal motions, this variety of motions man call's Place, Space, Time, Degrees, *&c.* conſidering them by themſelves, and giving them peculiar names, as if they could

be parted from body, or at leaſt be conceived without body; for the Conception or Imagination it ſelf is corporeal, and ſo are they nothing elſe but corporeal motions. But it ſeems as if this ſame *Author* conceived alſo motion to be a thing by it ſelf, and that motion begets motion, when he ſays, That a body by moving grows ſtronger in motion by degrees, when as yet the ſtrength was in the matter of the body eternally; for Nature was always a grave Matron, never a ſucking Infant: and though parts by diſſolving and compoſing may loſe and get acquaintance of each other, yet no part can be otherwiſe in its nature, then ever it was; Wherefore change of corporeal motions is not loſing nor getting ſtrength or ſwiftneſs; for Nature doth not loſe force, although ſhe doth not uſe force in all her various actions; neither can any natural body get more ſtrength then by nature it hath, although it may get the aſsiſtance of other bodies joyned to it. But ſwiftneſs and ſlowneſs are according to the ſeveral figurative actions of ſelf-moving matter; which ſeveral actions or motions of Nature, and their alterations, cannot be found out by any particular Creature: As for example, the motions of Lead, and the motions of Wood, unleſs Man knew their ſeveral cauſes; for Wood, in ſome caſes, may move ſlower then Lead; and Lead, in other caſes, ſlower then Wood. Again: the ſame *Author* ſays, *That an heavy moveable body deſcending, gets force enough to bring it back again to as much height.* But I think, it might as well be ſaid, That a Man walking a mile, gets as much ſtrength as to walk back that mile; when 'tis likely, that having walked ten miles, he may not have ſo much ſtrength as to walk back again one mile;

mile; neither is he neceſsitated to walk back, except ſome other more powerful body do force him back: for though Nature is ſelf-moving, yet every part has not an abſolute power, for many parts may over-power fewer; alſo ſeveral corporeal motions may croſs and oppoſe as well as aſsiſt each other; for if there were not oppoſition, as well as agreement and aſsiſtance amongſt Nature's parts, there would not be ſuch variety in Nature as there is. Moreover, he makes mention of a *Line, with a weight hung to its end, which being removed from the perpendicular, preſently falls to the ſame again.* To which, I anſwer: That it is the appetite and deſire of the Line, not to move by conſtraint, or any forced exterior motion; but that which forces the Line to move from the Perpendicular, doth not give it motion, but is onely an occaſion that it moves in ſuch a way; neither doth the line get that motion from any other exterior body, but it is the lines own motion; for if the motion of the hand, or any other exterior body, ſhould give the line that motion, I pray, from which doth it receive the motion to tend to its former ſtate? Wherefore, when the Line moves backwards or forwards, it is not, that the Line gets what it had not before, that is, a new corporeal motion, but it uſes its own motion; onely, as I ſaid, that exterior body is the occaſion that it moves after ſuch a manner or way, and therefore this motion of the line, although it is the lines own motion, yet in reſpect of the exterior body that cauſes it to move that way, it may be called a forced, or rather an occaſioned motion. And thus no body can get motion from another body, except it get matter too; for all that motion that a body has, proceeds from the ſelf-moving part of matter, and mo-

tion

tion and matter are but one thing; neither is there any inanimate part of matter in Nature, which is not co-mixed with the animate, and conſequently, there is no part which is not moving, or moved; the Animate part of matter is the onely ſelf-moving part, and the Inanimate the moved: not that the animate matter doth give away its own motion to the inanimate, and that the inanimate becomes ſelf-moving; but the animate, by reaſon of the cloſe conjunction and commixture, works together with the inanimate, or cauſes the inanimate to work with it; and thus the inanimate remains as ſimple in its own nature, as the animate doth in its nature, although they are mixt; for thoſe mixtures do not alter the ſimplicity of each others Nature. But having diſcourſed of this ſubject in my former Letters, I take my leave, and reſt,

MADAM,

Your faithful Friend

and Servant.

VI.

MADAM,

IT ſeems, my former Letter concerning Motion, has given you occaſion to propound this following queſtion to me, to wit, *When I throw a bowl, or ſtrike a ball with my hand, whether the motion, by which the bowl or ball is moved, be the hands, or the balls own motion?*

motion? or whether it be transferred out of my hand into the ball? To which, I return this ſhort anſwer: That the motion by which (for example) the bowl is moved, is the bowls own motion, and not the hands that threw it; for the hand cannot transfer its own motion, which hath a material being, out of it ſelf into the bowl, or any other thing it handles, touches, or moves; or elſe if it did, the hand would in a ſhort time become weak and uſeleſs, by loſing ſo much ſubſtance, unleſs new motions were as faſt created, as expended. You'l ſay, perhaps, that the hand and the bowl may exchange motions, as that the bowls own motion doth enter into the hand, and ſupply that motion which went out of the hand into the bowl, by a cloſe joyning or touch, for in all things moving and moved, muſt be a joyning of the mover to the moved, either immediate, or by the means of another body. I anſwer: That this is more probable, then that the hand ſhould give out, or impart motion to the bowl, and receive none from the bowl; but by reaſon motion cannot be transferred without matter, as being both inſeparably united, and but one thing; I cannot think it probable, that any of the animate or ſelf-moving matter in the hand, quits the hand, and enters into the bowl; nor that the animate matter, which is in the bowl, leaves the bowl, and enters into the hand, becauſe that ſelf-moving ſubſtance is not readily prepared for ſo ſudden a Tranſlation or Tranſmigration. You may ſay, It may as eaſily be done as food is received into an animal body and excrement diſcharged, or as air is taken in, and breath ſent out, by the way of reſpiration; and that all Creatures are not onely produced from each other, but

do ſubſiſt by each other, and act by each others aſsiſtance. I anſwer: It is very true, that all Creatures have more power and ſtrength by a joyned aſsiſtance, then if every part were ſingle, and ſubſiſted of it ſelf. But as ſome parts do aſsiſt each other, ſo on the other ſide, ſome parts do reſiſt each other; for though there be a unity in the nature of Infinite Matter, yet there are diviſions alſo in the Infinite parts of Infinite Matter, which cauſes Antipathy as much as Sympathy; but they being equal in aſsiſtance as well as in reſiſtance; it cauſes a conformity in the whole nature of Infinite Matter; for if there were not contrary, or rather, I may ſay, different effects proceeding from the onely cauſe, which is the onely matter, there could not poſsibly be any, or at leaſt, ſo much variety in Nature, as humane ſenſe and reaſon perceives there is: But to return to our firſt argument: You may ſay, that motion may be transferred out of one body into another, without transferring any of the Matter. I anſwer: That is impoſsible, unleſs motion were that which ſome call No-thing, but how No-thing can be transferred, I cannot imagine: Indeed no ſenſe and reaſon in Nature can conceive that which is No-thing; for how ſhould it conceive that which is not in Nature to be found. You'l ſay, perhaps, It is a ſubſtanceleſs thing, or an incorporeal, immaterial being or form. I anſwer: In my opinion, it is a meer contradiction, to ſay, a ſubſtanceleſs thing, form, or being, for ſurely in Nature it cannot be. But if it be not poſsible that motion can be divided from matter, you may ſay, that body from whence the motion is transferred, would become leſs in bulk and weight, and weaker with every act of motion;

and

and thoſe bodies into which corporeal motion or ſelf-moving matter was received, would grow bigger, heavier, and ſtronger. To which, I anſwer: That this is the reaſon, which denies that there can be a tranſlation of motion out of the moving body into the moved; for queſtionleſs, the one would grow leſs, and the other bigger, that by looſing ſo much ſubſtance, this by receiving. Nay if it were poſsible, as it is not, that motion could be transferred without matter, the body out of which it goes, would nevertheleſs grow weaker; for the ſtrength lies in the motion, unleſs you believe, this motion which is transferred to have been uſeleſs in the mover, and onely uſeful to the moved; or elſe it would be ſuperfluous in the moved, except you ſay, it became to be annihilated after it was transferr'd and had done its effect; but if ſo, then there would be a perpetual and infinite creation and annihilation of ſubſtanceleſs motion, and how there could be a creation and annihilation of nothing, my reaſon cannot conceive, neither is it poſsible, unleſs Nature had more power then God, to create Nothing, and to annihilate Nothing. The truth is, it is more probable for ſenſe and reaſon to believe a Creation of Something out of Nothing, then a Creation of Nothing out of Nothing. Wherefore it cannot in ſenſe and reaſon be, that the motion of the hand is transferr'd into the bowl. But yet I do not ſay, that the motion of the hand doth not contribute to the motion of the bowl; for though the bowl hath its own natural motion in it ſelf, (for Nature and her creatures know of no reſt, but are in a perpetual motion, though not always exterior and local, yet they have their proper and certain motions, which are not ſo eaſily perceived

ved by our groſſer ſenſes) nevertheleſs the motion of the bowl would not move by ſuch an exterior local motion, did not the motion of the hand, or any other exterior moving body give it occaſion to move that way; Wherefore the motion of the hand may very well be ſaid to be the cauſe of that exterior local motion of the bowl, but not to be the ſame motion by which the bowl moves. Neither is it requiſite, that the hand ſhould quit its own motion, becauſe it uſes *it in ſtirring up*, or putting on the motion of the *bowl*; for it is one thing to uſe, and another to *quit*; as for example, it is one thing to offer *his life* for his friends ſervice, another to imploy it, and another to quit or loſe it. But, *Madam*, there may be infinite queſtions or exceptions, and infinite anſwers made upon one truth; *but the* wiſeſt and moſt probable way is, to rely upon ſenſe and reaſon, and not to trouble the mind, thoughts, and actions of life, with improbabilities, or rather impoſsibilities, which ſenſe and reaſon knows not of, nor cannot conceive. You may ſay, A Man hath ſometimes improbable, or impoſsible Fancies, Imaginations, or Chymæra's, in his mind, which are No-things. I anſwer, That thoſe Fancies and Imaginations are not No-*things*, but as perfectly imbodied as any other Creatures; but by reaſon, they are not ſo groſly imbodied, as thoſe creatures that are compoſed of more ſenſitive and inanimate matter, man thinks or believes them to be no bodies; but were they ſubſtanceleſs figures, he could not have them in his mind or thoughts: The truth is, the purity of reaſon is not ſo perſpicuous and plain to ſenſe, as ſenſe is to reaſon, the ſenſitive matter being a groſſer ſubſtance then the rational. And thus, *Madam*,

I have anſwered your propoſed queſtion, according to the ability of my Reaſon, which I leave to your better examination, and reſt in the mean while,

MADAM,

Your Faithful Friend

and Servant.

VII.

MADAM,

HAving made ſome mention in my former Letter of the Receiving of Food, and diſcharging of Excrements, as alſo of Reſpiration, which conſiſts in the ſucking in of air, and ſending out of breath in an animal body; you deſire to know, *Whether Reſpiration be common to all animal Creatures?* Truly, I have not the experience, as to tell you really, whether all animals reſpire, or not; for my life being, for the moſt part, ſolitary and contemplative, but not active, I pleaſe my *ſelf* more with the motions of my thoughts, then of my ſenſes; and therefore I ſhall give you an anſwer according to the conceivement of my reaſon onely, which is, That I believe, all animals require Reſpiration; not onely thoſe, which live in the air, but thoſe alſo, which live in waters, and within the earth; but they do not reſpire all after one and the ſame manner; for the matter which they imbreath, is not every where the ſame, nor have they all the ſame organs, or

parts, nor the ſame motions. As for example: Some Creatures require a more thin and rarer ſubſtance for their imbreathing or inſpiring, then others, and ſome a more thick and groſſer ſubſtance then others, according to their ſeveral Natures; for as there are ſeveral kinds of Creatures, according to their ſeveral habitations or places they live in, ſo they have each a *diſtinct* and ſeveral ſort of matter or ſubſtance for their inſpiraration. As for example: Some live in the *Air*, ſome upon the face of the Earth, ſome *in the bowels* of the Earth, and ſome in Waters. There is ſome report of a Salamander, who *lives* in the Fire; but *it being not certainly known*, deſerves not our ſpeculation. And, as in my opinion, all animal Creatures require Reſpiration, ſo I do verily believe, that alſo *all other kinds* of Creatures, beſides animals, have ſome certain manner of imbreathing and transſpiring, *viz.* Vegetables, Minerals, and Elements, although not after the ſame way as Animals, yet in a way peculiar and proper *to* the nature of their own kind. For example: Take away the earth from Vegetables, and they will die, as being, in my opinion, ſtifled or ſmothered, in the ſame manner, as when the *Air* is taken away from ſome Animals. Alſo, take Minerals out of the bowels of the Earth, and though we cannot ſay, they die, or are dead, becauſe we have not as yet found out the *alterative* motions of Minerals, as well as of Vegetables, or Animals, yet we know that they are dead *from* production and increaſe, for not any Metal increaſes being out of the Earth. And as for Elements, it is manifeſt that Fire will die for want of vent; but the reſt of the Elements, if we could come to know the matter, manner,

ner, and ways of their Vital Breathing, we might kill or revive them as we do Fire. And therefore all Creatures, to my Reaſon, require a certain matter and manner of inſpiration and expiration, which is nothing elſe but an adjoyning and disjoyning of parts to and from parts; for not any natural part or creature can ſubſiſt ſingle, and by it ſelf, but requires aſsiſtance from others, as this, and the reſt of my opinions in Natural Philoſophy, deſire the aſsiſtance of your favour, or elſe they will die, to the grief of,

MADAM,

Your faithful Friend

and Servant.

VIII.

MADAM,

THE other day I met with the Work of that Learned *Author* Dr. *Ch.* which treats of Natural Philoſophy; and amongſt the reſt, in the Chapter of Place, I found that he blames *Ariſtotle* for ſaying, there are none but corporeal dimenſions, Length, Breadth, and Depth in Nature, making beſides theſe corporeal, other incorporeal dimenſions which he attributes to *Vacuum.* Truly, *Madam,* an incorporeal dimenſion or extenſion, ſeems, in my opinion, a meer contra-

contradiction; for I cannot conceive how nothing can have a dimenſion or extenſion, having nothing to be extended or meaſured. His words are theſe: *Imagine we therefore, that God ſhould pleaſe to annihilate the whole ſtock or maſs of Elements, and all concretions reſulting therefrom, that is, all corporeal ſubſtances now contained within the ambit or concave of the loweſt Heaven, or Lunar ſphear; and having thus imagined, can we conceive that all the vaſt ſpace or region circumſcribed by the concave ſuperfice of the Lunar ſphere, would not remain the ſame in all its dimenſions, after as before the reduction of all bodies included therein to nothing?* To which, I anſwer: That, in my opinion, he makes Nature Supernatural; for although God's Power may make Vacuum, yet Nature cannot; for God's and Nature's Power are not to be compared, neither is God's inviſible Power perceptible by Natures parts; but according to Natural Perception, it is impoſsible to conceive a Vacuum, for we cannot immagine a Vacuum, but we muſt think of a body, as your *Author* of the Circle of the Moon; neither could he think of ſpace but from one ſide of the Circle to the other, ſo that in his mind he brings two ſides together, and yet will have them diſtant; but the motions of his thoughts being ſubtiler and ſwifter then his ſenſes, skip from ſide to ſide without tonching the middle parts, like as a Squirrel from bough to bough, or an Ape from one table to another, without touching the ground, onely cutting the air. Next, he ſays, That an abſolute Vacuum, is neither an Accident, nor a Body, nor yet Nothing, but Something, becauſe it has a being; which opinion ſeems to me like that of the divine Soul; but I ſuppoſe Vacuum is not the

divine

divine Soul, nor the divine Soul, Vacuum; or elſe it could not be ſenſible of the bleſſed happineſs in Heaven, or the Torments in Hell. Again he ſays, *Let us ſcrew our ſuppoſition one pin higher, and farther imagine, that God, after the annihilation of this vaſt machine, the Univerſe, ſhould create another in all reſpects equal to this, and in the ſame part of ſpace wherein this now conſiſts: Firſt, we muſt conceive, that as the ſpaces were immenſe before God created the world, ſo alſo muſt they eternally perſiſt of infinite extent, if he ſhall pleaſe at any time to deſtroy it; Next, that theſe immenſe ſpaces are abſolutely immoveable.* By this opinion, it ſeems, that Gods Power cannot ſo eaſily make or annihilate Vacuum, as a ſubſtance; becauſe he believes it to be before all Matter, and to remain after all Matter, which is to be eternal; but I cannot conceive, why Matter, or fulneſs of body, ſhould not as well be Infinite and Eternal, as his conceived Vacuum; for if Vacuum can have an eternal and infinite being, why may not fulneſs of body, or Matter? But he calls Vacuum Immovable, which in my opinion is to make it a God; for God is onely Immoveable and Unalterable, and *this is* more Glorious then to be dependant upon God; wherefore to believe Matter to be Eternal, but yet dependent upon God, is a more humble opinion, then his opinion of Vacuum; for if Vacuum be not created, and ſhall not be annihilated, but is Uncreated, Immaterial, Immoveable, Infinite, and Eternal, it is a God; but if it be created, God being not a Creator of Nothing, nor an annihilator of Nothing, but of Something, he cannot be a Creator of Vacuum; for Vacuum is

a pure Nothing. But leaving Nothing to thoſe that can make ſomething of it, I will add no more, but reſt,

MADAM,

Your faithful Friend,

and Servant.

IX.

MADAM,

THat Learned *Author*, of whom I made mention in my laſt, is pleaſed to ſay in his Chapter of Time, that Time is the *Twin-brother to Space*; but if Space be as much as Vacuum, then I ſay, they are Twin-nothings; for there can be no ſuch thing as an empty or immaterial ſpace, but that which man calls ſpace, is onely a diſtance betwixt ſeveral corporeal parts, and time is onely the variation of corporeal motions; for were there no body, there could not be any ſpace, and were there no corporeal motion, there could not be any time. As for Time, conſidered in General, it is nothing elſe but the corporeal motions in Nature, and Particular times are the Particular corporeal motions; but Duration is onely a continuance, or continued ſubſiſtence of the ſame parts; cauſed by the conſiſtent motions of thoſe parts; Neither are Time, Duration, Place, Space, Magnitude, *&c.* dependents upon corporeal motions, but they are all one

and

and the ſame thing; Neither was Time before, nor can be after corporeal motion, for none can be without the other, being all one: And as for Eternity, it is one fixed inſtant, without a flux, or motion. Concerning his argument of Diviſibility of Parts, my opinion is, That there is no Part in Nature Individable, no not that ſo ſmall a part, which the Epicureans name an Atome; neither is Matter ſeparable from Matter, nor Parts from Parts in General, but onely in Particulars; for though parts can be ſeparated from parts, by ſelf-motion, yet upon neceſsity they muſt joyn to parts, ſo as there can never be a ſingle part by it ſelf. But hereof, as alſo of Place, Space, Time, Motion, Figure, Magnitude, &c. I have ſufficiently diſcourſed in my former Letters, as alſo in my Book of Philoſophy; and as for my opinion of Atoms, their figures and motions, (if any ſuch things there be) I will refer you to my Book of Poems, out of which give me leave to repeat theſe following lines, containing the ground of my opinion of Atomes:

All Creatures, howſoe're they may be nam'd,
Are of long, ſquare, flat, *or* ſharp *Atomes fram'd.* Pag. 7. in the ſecond Impreſſion.

Thus ſeveral figures ſeveral tempers make,
But what is mixt, doth of the four partake. Pag. 9.

The onely cauſe, why things do live and die,
'S according as the mixed Atomes lie. Pag. 22.

Thus life, and death, and young, and old,
Are as the ſeveral Atoms hold:
Wit, underſtanding in the brain
Are as the ſeveral atomes reign: Pag. 24.

And

And diſpoſitions, good, or ill,
Are as the ſeveral atomes ſtill;
And every Paſſion, which doth riſe,
Is as each ſeveral atomie lies.
Thus ſickneſs, health, and peace, and war,
Are as the ſeveral atomes are.

If you deſire to know more, you may read my mentioned Book of Poems whoſe firſt Edition was printed in the year, 1653. And ſo taking my leave of you, I reſt,

MADAM,

Your faithful Friend

and Servant.

MADAM,

I Received the Book of your new *Author* that treats of Natural Philoſophy, which I perceive is but lately come forth; but although it be new, yet there are no new opinions in it; for the *Author* doth follow the opinions of ſome old Philoſophers, and argues after the accuſtomed Scholaſtical way, with hard, intricate, and nonſenſical words: Wherefore I ſhall not take ſo much pains as to read it quite over, but onely pick out here and there ſome few diſcourſes, which I ſhall think moſt convenient for the clearing of my own opinion; in the number

number of which, is, firſt, that of Matter, whereof the *Author* is pleaſed to proclaim the opinion that holds Matter to be Infinite, not onely abſurd, but alſo impious. Truly, *Madam*, it is eaſily ſaid, but hardly proved; and not to trouble you with unneceſſary repetitions, I hope you do remember as yet what I have written to you in the beginning concerning the infiniteneſs of Nature, or natural Matter, where I have proved that it implies no impiety, abſurdity, or contradiction at all, to believe that Matter is Infinite; for your *Authors* argument, concluding from the finiteneſs of particular Creatures to Nature her ſelf, is of no force; for though no part of Nature is Infinite in bulk, figure, or quantity, nevertheleſs, all the parts of Infinite Nature are Infinite in number, which infinite number of parts muſt needs make up one Infinite body in bulk, or quantity; for as a finite body or ſubſtance is dividable into finite parts, ſo an Infinite body, as Nature, or natural Matter, muſt of neceſsity be dividable into infinite parts in number, and yet each part muſt alſo be finite in its exterior figure, as I have proved in the beginning by the example of a heap of grains, of corn. Certainly, *Madam*, I ſee no reaſon, but ſince, according to your *Author*, God, as the prime Cauſe, Agent, and Producer of all things, and the action by which he produced all things, is Infinite; the Matter out of which he produced all particular Creatures may be Infinite alſo. Neither doth it, to my ſenſe and reaſon, imply any contradiction or impiety; for it derogates nothing from the Glory and Omnipotency of God, but God is ſtill the God of Nature, and Nature is his Servant, although Infinite, depending wholly upon the will and pleaſure

of the All-powerful God: Neither do theſe two Infinites obſtruct each other; for Nature is corporeal, and God is a ſupernatural and ſpiritual Infinite Being, and although Nature has an Infinite power, yet ſhe has but an Infinite Natural power, whereas Gods Omnipotency is infinitely extended beyond Nature. But your *Author* is pleaſed to refute that argument, which concludes from the effect to the cauſe, and proves Matter to be infinite, becauſe God as the Cauſe *is* Infinite, ſaying, that this Rule doth *onely hold* in Univocal things, (by which, I ſuppoſe, he underſtands things of the ſame kind and nature) and not in oppoſites. *Truly, Madam*, by this he limits Gods power, as if God were not able to work beyond Nature, and Natural Reaſon or Underſtanding; and meaſures Gods actions according to the rules of Logick; which whether it be not more impious, you may judg your ſelf. And as for oppoſites, God and Nature are not oppoſites, except you will call oppoſites thoſe which bear a certain relation to one another, as a Cauſe, and its Effect; a Parent, and a Child; a Maſter, and a Servant; and the like. Nay, I wonder how your *Author* can limit Gods action, when as he confeſſes himſelf, that the Creation of the World is an Infinite action. God acted finitely, ſays he, by an Infinite action; which, in my opinion, is meer non-ſenſe, and as much as to ſay, a man can act weakly by a ſtrong action, baſely by an honeſt action, cowardly by a ſtout action. The truth is, God being Infinite, cannot work finitely; for, as his Eſſence, ſo his Actions cannot have any limitation, and therefore it is moſt probable, that God made Nature Infinite; for though each part of Nature *is* finite

in

in its own figure, yet conſidered in general, they are Infinite, as well in number, as duration, except God be pleaſed to deſtroy them; nay, every particular may in a certain ſenſe be ſaid Infinite, to wit, Infinite in time or duration; for if Nature be Infinite and Eternal, and there be no annihilation or periſhing in Nature, but a perpetual ſucceſsive change and alteration of natural figures, then no part of Nature can periſh or be annihilated; and if no part of Nature periſhes, then it laſts infinitely in Nature, that is, in the ſubſtance of natural Matter; for though the corporeal motions, which make the figures, do change, yet the ground of the figure, which is natural matter, never changes. The ſame may be ſaid of corporeal motions: for though motions change and vary infinite ways, yet none is loſt in Nature, but ſome motions are repeated again: As for example; the natural motions in an Animal Creature, although they are altered in the diſſolution of the animal figure, yet they may be repeated again by piecemeals in other Creatures; like as a Commonwealth, or united body in ſociety, if it ſhould be diſſolved and diſperſed, the particulars which did conſtitute this Commonwealth or ſociety, may joyn to the making of another ſociety; and thus the natural motions of a body do not periſh when the figure of the body diſſolves, but joyn with other motions to the forming and producing of ſome other figures. But to return to your *Author*. I perceive his diſcourſe is grounded upon a falſe ſuppoſition, which appears by his way of arguing from the courſe of the Starrs and Planets, to prove the finiteneſs of Nature; for by reaſon the Stars and Planets rowl about, and turn to the ſame point again, each within

within a certain compaſs of time, he concludes Nature or Natural Matter to be finite too. And ſo he takes a part for the whole, to wit, this viſible World for all Nature, when as this World is onely a part of Nature, or Natural Matter, and there may be more and Infinite worlds beſides; Wherefore his concluſion muſt needs be falſe, ſince it is built upon a falſe ground. Moreover, he is as much againſt the Eternity of Matter, as he is againſt Infiniteneſs; concluding likewiſe from the parts to the whole: For, *ſays he*, ſince the parts of Nature are ſubject to a beginning and ending, the whole muſt be ſo too. But he is much miſtaken, when he attributes a beginning and ending to parts, for there is no ſuch thing as a beginning and ending in Nature, neither in the whole, nor in the parts, by reaſon there is no new creation or production of Creatures out of new Matter, nor any total deſtruction or annihilation of any part in Nature, but onely a change, alteration and tranſmigration of one figure into another; which change and alteration proves rather the contrary, to wit, that Matter is Eternal and Incorruptible; for if particular figures change, they muſt of neceſsity change in the Infinite Matter, which it ſelf, and in its nature, is not ſubject to any change or alteration: beſides, though particulars have a finite and limited figure, and do change, yet their ſpecies do not; for Mankind never changes, nor ceaſes to be, though *Peter* and *Paul* die, or rather their figures diſſolve and divide; for to die is nothing elſe, but that the parts of that figure divide and unite into ſome other figures by the change of motion in thoſe parts. Concerning the Inanimate Matter, which

which of it ſelf is a dead, dull, and idle matter, your *Author* denies it to be a co-agent or aſsiſtant to the animate matter: For, ſays he, how can dead and idle things act? To which, I anſwer: That your *Author* being, or pretending to be a Philoſopher, ſhould conſider that there is difference betwixt a Principal and Inſtrumental cauſe or agent; and although this inanimate, or dull matter, doth not act of it ſelf as a principal agent, yet it can and doth act as an Inſtrument, according as it is imploy'd by the animate matter: for by reaſon there is ſo cloſe a conjunction and commixture of animate and inanimate Matter in Nature, as they do make but one body, it is impoſsible that the animate part of matter ſhould move without the inanimate; not that the inanimate hath motion in her ſelf, but the animate bears up the inanimate in the action of her own ſubſtance, and makes the inanimate work, act, and move with her, by reaſon of the aforeſaid union and commixture. Laſtly, your *Author* ſpeaks much of Minima's, *viz.* That all things may be reſolved into their minima's, and what is beyond them, is nothing, and that there is one maximum, or biggeſt, which is the world, and what is beyond that, is Infinite. Truly, *Madam*, I muſt ingeniouſly confeſs, I am not ſo high learned, as to penetrate into the true ſenſe of theſe words; for he ſays, they are both diviſible, and indiviſible, and yet no atomes, which ſurpaſſes my Underſtanding; for there is no ſuch thing, as biggeſt and ſmalleſt in Nature, or in the Infinite matter; for who can know how far this World goes, or what is beyond it? There may be Infinite Worlds, as I ſaid before, for ought we know; for God and Nature cannot be

comprehended, nor their works meaſured, if we cannot find out the nature of particular things, which are ſubject to our exterior ſenſes, how ſhall we be able to judg of things not ſubject to our ſenſes. But your *Author* doth ſpeak ſo preſumptuouſly of Gods Actions, Deſigns, Decrees, Laws, Attributes, Power, and ſecret Counſels, and deſcribes the manner, how God created all things, and the mixture of the Elements to an hair, as if he had been Gods Counſellor and Aſsiſtant in the work of Creation; which whether it be not more impiety, then to ſay, Matter is Infinite, I'le let others judg. Neither do I think this expreſsion to be againſt the holy Scripture; for though I ſpeak as a natural Philoſopher, and am unwilling to cite the Scripture, which onely treats of things belonging to Faith and, and not to Reaſon; yet I think there is not any paſſage which plainly denies Matter to be Infinite, and Eternal, unleſs it be drawn by force to that ſenſe: *Solomon* ſays, *That there is not any thing new*: and in another place it is ſaid, *That God is all fulfilling*; that is, The Will of God is the fulfilling of the actions of Nature: alſo the Scripture ſays, *That Gods ways are unſearchable, and paſt finding out.* Wherefore, it is eaſier to treat of Nature, then the God of Nature; neither ſhould God be treated of by vain Philoſophers, but by holy Divines, which are to deliver and interpret the Word of God without ſophiſtry, and to inform us as much of Gods Works, as he hath been pleaſed to declare and make known. And this is the ſafeſt way, in the opinion of,

MADAM,

Your faithful Friend
and Servant.

M. A.

XI.

MADAM,

YOur new *Author* endeavours to prove, that Water in its own proper nature is thicker then Earth; which, to my ſenſe and reaſon, ſeems not probable; for although water is leſs porous then earth in its exterior figure, yet 'tis not ſo thick as earth in its interior nature: Neither can I conceive it to be true, that water in its own nature, and as long as it remains water, ſhould be as hard as Cryſtal, or ſtone, as his opinion is; for though Elements are ſo pliant (being not compoſed of many different parts and figures) as they can change and rechange their exterior figures, yet they do not alter their interior nature without a total diſſolution; but your *Author* may as well ſay, that the interior nature of man is duſt and aſhes, as that water in its interior nature is as thick as earth, and as hard as Chriſtal, or ſtone; whereas yet a man, when he becomes duſt and aſhes, is not a man; and therefore, when water is become ſo thick as earth, or ſo hard as ſtone, it is not water; I mean when it is ſo in its interior nature, not in its exterior figure; for the exterior figure may be contracted, when yet the interior nature is dilative; and ſo the exterior may be thick or hard, when the interior is ſoft and rare. But you may ſay, that water is a cloſe, and heavy, as alſo a ſmooth and gloſſy body. I anſwer: That doth not prove its interior nature to be hard, denſe, thick, or contracted; for the interior

nature

nature and parts of a body may be different from the exterior figure or parts; neither doth the cloſe joyning of parts hinder dilatation; for if ſo, a line or circle could not dilate or extend: But this cloſe uniting of the parts of water is cauſed through its wet and glutinous quality, which wet and ſticking quality is cauſed by a watery dilatation; for though water hath not interiouſly ſo rare a dilatation as Air, Fire, and Light, yet it hath not ſo cloſe a contraction as Earth, Stone, or Metal; neither are all bodies that are ſmooth and ſhining, more ſolid and denſe, then thoſe that are rough and dark; for light is more ſmooth, gloſſy, and ſhining, then Water, Metal, Earth, or Tranſparent-ſtones, and yet is of a dilative nature. But becauſe ſome bodies and figures which are tranſparent and ſmooth; are denſe, hard, and thick, we cannot in reaſon, or ſenſe, ſay, that all bodies and figures are ſo. As for Tranſparency, it is cauſed through a purity of ſubſtance, and an evenneſs of parts: the like is gloſsineſs, onely gloſsineſs requires not ſo much regularity, as tranſparency. But to return to Water; its exterior Circle-figure may eaſily dilate beyond the degree of the propriety or nature of water, or contract beneath the propriety or nature of water. Your *Author* may ſay, Water is a globous body; and all globous bodies tend to a Center. I anſwer: That my ſenſe and reaſon cannot perceive, but that Circles and Globes do as eaſily dilate, as contract: for if all Globes and Circles ſhould endeavour to draw or fall from the circumference to the Center, the Center of the whole World, or at leaſt of ſome parts of the World, would be as a Chaos: beſides, it is againſt ſenſe and reaſon, that all Matter ſhould ſtrive to a Center

Center; for humane ſenſe and reaſon may obſerve, that all Creatures, and ſo Matter, deſire liberty, and a Center is but a Priſon in compariſon to the Circumference; wherefore if Matter crowds, it is rather by force, then a voluntary action. You will ſay, All Creatures deſire reſt, and in a Center there's reſt. I anſwer; Humane ſenſe and reaſon cannot perceive any reſt in Nature: for all things, as I have proved heretofore, are in a perpetual motion. But concerning Water, you may ask me, *Madam*, Whether congeal'd Water, as Ice, *if it* never thaw, remains Water? To which, I anſwer: That the interior nature of Water remains as long as the Ice remains, although the outward form is changed; but if Ice be contracted into the firmneſs and denſity of Cryſtal, or Diamond, or the like, ſo as to be beyond the nature of Water, and not capable to be that Water again, then it is transformed into another Creature, or thing, which is neither Water, nor Ice, but a Stone; for the Icy contraction doth no more alter the interior nature of Water, which is dilating, then the binding of a man with Chains alters his nature from being a man; and it might be ſaid as well, that the nature of Air is not dilating, when incloſed in a bladder, as that Water doth not remain Water in its interior nature, when it is contracted into Ice. But you may ask, Whether one extreme can change into another? I anſwer: To my ſenſe and reaſon it were poſsible, if extremes were in Nature; but I do not perceive that in Nature there be any, although my ſenſe and reaſon doth perceive alterations in the effects of Nature; for though one and the ſame part may alter from contraction to dilation, and from dila-

tion to contraction; yet this contraction and dilation are not extremes, neither are they performed at one and the ſame time, but at different times. But having ſufficiently declared my opinion hereof in my former Letters, I'l add no more, but reſt,

MADAM,

Your faithful Friend

and Servant.

XII.

MADAM,

MY diſcourſe of Water in my laſt Letter has given you occaſion to enquire after the reaſon, *Why the weight of a great body of water doth not preſs ſo hard and heavily as to bruiſe or cruſh a body, when it is ſunk down to the bottom?* As for example: If a man ſhould be drowned, and afterwards caſt out from the bottom of a great Sea, or River, upon the ſhore; he would onely be found ſmother'd or choak'd to death, and not preſs'd, cruſh'd, or bruiſed, by the weight of water. I anſwer; The reaſons are plain: for, firſt, the nature of a mans reſpiration requires ſuch a temperature of breath to ſuck in, as is neither too thick, nor too thin for his lungs, and the reſt of his interior parts, as alſo for the organs and paſſages of his exterior ſenſes, but fit, proper, and proportionable to thoſe mentioned parts of his body. As for example; in a too thin and rarified

rarified air, man will be as apt to die for want of breath, as in a too groſs and thick air he is apt to die with a ſuperfluity of the ſubſtance he imbreaths; for thick ſmoak, or thick vapour, as alſo too groſs air, will ſoon ſmother a man to death; and as for choaking, if a man takes more into his throat then he can ſwallow, he will die; and if his ſtomack be filled with more food then it is able to digeſt, if it cannot diſcharge it ſelf, he will die with the exceſs of food; and if there be no food, or too little put into it, he will alſo die for want of food. So the eye, if it receives too many, or too groſs, or too bright objects, it will be dazled or blinded, and ſome objects through their purity are not to be ſeen at all: The ſame for Hearing, and the reſt of the exterior ſenſes. And this is the reaſon, why man, or ſome animal Creatures are ſmother'd and choak'd with water; becauſe water is thicker then the groſſeſt air or vapour; for if ſmoak, which is rarer then water, will ſmother and choak a man, well may water, being ſo much thicker. But yet this ſmothering or choaking doth not prove, that water hath an interior or innate denſity (as your *Authors* opinion is) no more then ſmoak, or thick and groſs air hath; but the denſity of water is cauſed more through the wet and moiſt exterior parts, joyning and uniting cloſely together; and the interior nature of ſmoak being more moiſt or glutinous then thin air, and ſo more apt to unite its exterior parts, it makes it to come in effect nearer to water; for though water and ſmoak are both of rare natures, yet not ſo rare as clear and pure air; neither is water or ſmoak ſo porous as pure air, by reaſon the exterior parts of water and ſmoak are more moiſt or glutinous then pure air. But the thickneſs of

water

water and ſmoak is the onely cauſe of the ſmothering of men, or ſome animals, as by ſtopping their breath; for a man can no more live without air, then he can without food; and a well tempered or middle degree of air is the moſt proper for animal Reſpiration; for if the air be too thick, it may ſoon ſmother or choak him; and if too thin, it is not ſufficient to give him breath: And this is the reaſon that a man being drown'd, is not onely ſmother'd, but choak'd by water; becauſe there enters more through the exterior paſſages into his body then can be digeſted; for water is apt to flow more forcibly and with greater ſtrength then air; not that it is more dilating then air, but by reaſon it is thicker, and ſo ſtronger, or of more force; for the denſer a body is, the ſtronger it is; and a heavy body, when moved, is more forcible then a light body. But I pray by this expreſsion miſtake not the nature of water; for the interior nature of water hath not that gravity, which heavy or denſe bodies have, its nature being rare and light, as air, or fire; but the weight of water, as I ſaid before, proceeds onely from the cloſeneſs and compactneſs of its exterior parts, not through a contraction in its interior nature; and there is no argument, which proves better, that water in its interior nature is dilating, then that its weight is not apt to preſs to a point; for though water is apt to deſcend, through the union of its parts, yet it cannot preſs hard, by reaſon of its dilating nature, which hinders that heavy preſsing quality; for a dilating body cannot have a contracted weight, I mean, ſo as to preſs to a Center, which is to a point; and this is the reaſon, that when a grave or heavy body ſinks down to the bottom of water,

water, it is not oppreſt, hurt, cruſht, or bruiſed by the weight of water; for, as I ſaid, the nature of water being dilating, it can no more preſs hard to a center, then vapour, air, or fire: The truth is, water would be as apt to aſcend as deſcend, if it were not for the wet, glutinous and ſticking, cleaving quality of its exterior parts; but as the quantity and quality of the exterior parts makes water apt to ſink, or deſcend, ſo the dilating nature makes it apt to flow, if no hinderance ſtop its courſe; alſo the quantity and quality of its exterior parts is the cauſe, that ſome heavy bodies do ſwim without ſinking: as for example; a great heavy Ship will not readily ſink, unleſs its weight be ſo contracted as to break aſunder the united parts of water; for the wet quality of water cauſing its exterior parts to joyn cloſe, gives it ſuch an united ſtrength, as to be able to bear a heavy burden, if the weight be dilated, or level, and not piercing or penetrating; for thoſe bodies that are moſt compact, will ſink ſooner, although of leſs weight then thoſe that are more dilated although of greater weight: Alſo the exterior and outward ſhape or form makes ſome bodies more apt to ſink then others; Indeed, the outward form and ſhape of Creatures is one of the chief cauſes of either ſinking or ſwimming. But to conclude, water in its interior nature is of a mean or middle degree, as neither too rare, nor too grave a body; and for its exterior quality, it is in as high a degree for wetneſs, as fire is for heat; and being apt both to divide, and to unite, it can bear a burden, and devour a burden, ſo that ſome bodies may ſwim, and others ſink; and the cauſe, that a ſunk body is not oppreſt, cruſh'd, or ſqueeſed, is the dilating nature and quality

of water, which hinders its parts from preſsing or crowding towards a point or center; for although water is heavy, and apt to deſcend, yet its weight is not cauſed by a contraction of its ſubſtance, but by a union of its parts. Thus, *Madam*, I have obeyed your commands, in giving you my reaſons to your propounded queſtion; which if you approve, I have my aim; if not, I ſubmit to your better judgment: for you know I am in all reſpects,

MADAM,

Your Faithful Friend

to ſerve you.

XIII

MADAM,

I Am glad, you are pleaſed with my reaſons I gave to your propounded queſtion concerning the weight of Water; and ſince you have been pleaſed to ſend me ſome more of that ſubject, I ſhall be ready alſo to give my anſwer to them, according to the capacity of my judgment. Firſt, you deſire to know, *How it comes, that Water will by degrees aſcend through a narrow pipe, when the pipe is placed ſtraight upright, or perpendicular?* The reaſon, in my opinion is, that Water, having a dilative nature, when it finds an obſtruction to deſcend or flow even, will dilate it ſelf aſcendingly, according as it hath liberty, or freedom, and ſtrength

ſtrength, or quantity; the truth is, water would be more apt to aſcend then to deſcend, were it not for the cloſe uniting of its liquid Parts, which cauſes its exterior denſity, and this denſity makes it of more weight then its nature is; and the proof that water is apt in its nature to aſcend, is, that ſome ſorts of vapours are made onely by the dilation and rarefaction of aſcending Water. Your ſecond queſtion is, *Why the ſurface of water ſeems to be concave in its middle, and higher on every ſide?* I anſwer, The interior figure of water is a circular figure, which being a round figure, is both concave, and convex; for where one is, the other muſt be; and the motions of ebbing and flowing, and aſcending or deſcending, are partly of that figure; and ſo according to the exterior dilating ſtrength or weakneſs, the exterior parts of water become either concave or convex; for in a full ſtrength, as a full ſtream, the exterior parts of water flow in a convex figure, but when they want ſtrength, they ebb in a concave figure. Your third queſtion is, *What makes frozen water apt to break thoſe Veſſels wherein it is contained, in the act of freezing or congealing?* I anſwer: The ſame cauſe that makes water clear, as alſo more ſwell'd then uſually it is: which cauſe is the inherent dilative nature of water; for water being naturally dilative, when as cold attractions do aſſault it, the moiſt dilations of water in the conflict uſe more then their ordinary ſtrength to reſiſt thoſe cold contracting motions, by which the body of water dilates it ſelf into a larger compaſs, according as it hath liberty or freedom, or quantity of parts; and the cold parts not being able to drive the water back to its natural compaſs, bind it as it is extended, like as if a beaſt ſhould be bound when his

his legs and neck are thruſt out at the largeſt extent, in ſtriving to kick or thruſt away his enemies and impriſoners: And ſo the reaſon why water breaks thoſe veſſels wherein it is incloſed, in the act of its freezing or congealing is, that when the cold contractions are ſo ſtrong as they endeavour to extinguiſh the dilating nature of water, the water reſiſting, forces its parts ſo, as they break the veſſel which incloſes them: The ſame reaſon makes Ice clear and tranſparent; for it is not the rarefaction of water that doth it, but the dilation, which cauſes the parts of water to be not onely more looſe and porous, but alſo more ſmooth and even, by reſiſting the clold contractions; for every part endeavours to defend their borders with a well ordered and regular flowing or ſtreaming, and not onely to defend, but to enlarge their compaſs againſt their enemies. Your fourth queſtion is, How it comes *that Snow and Salt mixt together doth make Ice?* The reaſon, in my judgment, is, that Salt being very active, and partly of the nature of fire, doth ſometimes preſerve, and ſometimes deſtroy other bodies, according to its power, or rather according to the nature of thoſe bodies it works on; and ſalt being mixt with ſnow, endeavours to deſtroy it; but having not ſo much force, melts it onely by its heat, and reduces it into its firſt principle, which is water, altering the figure of ſnow; but the cold contractions remaining in the water, and endeavouring to maintain and keep their power, ſtraight draw the water or melted ſnow into the figure of ice, ſo as neither the ſalts heat, nor the waters dilative nature, are able to reſiſt or deſtroy thoſe cold contractions; for although they deſtroy'd the firſt figure, which is ſnow, yet they cannot hinder

the

the ſecond, which is Ice, Your laſt queſtion is, *How the Clouds can hang ſo long in the Skie without falling down?* Truly, *Madam*, I do not perceive that Clouds, being come to their full weight and gravity, do keep up in the air, but ſome of them fall down in ſhowres of rain, others in great and numerous flakes of ſnow; ſome are turned into wind, and ſome fall down in thick miſts, ſo that they onely keep up ſo long, until they are of a full weight for deſcent, or till their figure is altered into ſome other body, as into air, wind, rain, lightning, thunder, ſnow, hail, miſt, and the like. But many times their dilating motions keep or hinder them from deſcending, to which contracting motions are required. In my opinion, it is more to be admired, that the Sea doth not riſe, then that Clouds do not fall; for, as we ſee, Clouds fall very often, as alſo change from being Clouds, to ſome other figure: Wherefore it is neither the Sun, nor Stars, nor the Vapours, which ariſe from the Earth, and cauſe the Clouds, nor the poroſitity of their bodies, nor the Air, that can keep or hinder them from falling or changing to ſome other body; but they being come to their full weight, fall or change according as is fitteſt for them. And theſe are all the reaſons I can give you for the preſent; if they do not ſatisfie you, I will ſtudy for others, and in all occaſions endeavour to expreſs my ſelf,

MADAM,

Your conſtant Friend,

and faithful Servant.

XIV.

MADAM,

SInce in my laſt, I made mention of the Congealing of Water into Ice and Snow, I cannot chooſe, but by the way tell you, that I did lately meet with an Author, who is of opinion, That Snow is nothing elſe but Ice broken or ground into ſmall pieces. To which, I anſwer: That this opinion may ſerve very well for a Fancy, but not for a Rational Truth, or at leaſt for a Probable Reaſon; For why may not the cold motions make ſnow without beating or grinding, as well as they make Ice? Surely Nature is wiſer then to trouble her ſelf with unneceſſary labour, and to make an eaſie work difficult, as Art her Creature doth, or as ſome dull humane capacities conceive; for it is more eaſie for Nature to make Snow by ſome ſorts of cold contractions, as ſhe makes Ice by other ſorts of cold contractions, then to force Air and Wind to beat, grinde, or pound Ice into Snow, which would cauſe a confuſion and diſturbance through the Irregularity of ſeveral parts, being jumbled in a confuſed manner together. The truth is, it would rather cauſe a War in Nature, then a natural production, alteration, or tranſformation: Neither can I conceive, in what region this turbulent and laborious work ſhould be acted; certainly not in the caverns of the Earth, for ſnow deſcends from the upper Region. But, perchance, this *Author* believes, that Nature imploys Wind as a Hand, and the

the Cold air as a Spoon, to beat Ice like the white of an Egg into a froth of Snow. But the great quantity of Snow, in many places, doth prove, that Snow is not made of the fragments of Ice, but that ſome ſorts of cold contractions on a watery body, make the figure of ſnow in the ſubſtance of water, as other ſorts of cold contractions make the figure of ice; which motions and figures I have treated of in my Book of Philoſophy, according to that Judgment and Reaſon which Nature has beſtowed upon me. The Author of this Fancy, gives the ſame reaſon for Snow being white: *For Ice,* ſays he, *is a tranſparent body, and all tranſparent bodies, when beaten into powder, appear white; and ſince Snow is nothing elſe but Ice powder'd ſmall, it muſt of neceſsity ſhew white.* Truly, *Madam,* I am not ſo experienced, as to know that all tranſparent bodies, being beaten ſmall, ſhew white; but grant it be ſo, yet that doth not prove, that the whiteneſs of ſnow proceeds from the broken parts of Ice, unleſs it be proved that the whiteneſs of all bodies proceeds from the powdering of tranſparent bodies; which I am ſure he cannot do; for Silver, and millions of other things are white, which were never produced from the powder of tranſparent bodies: Neither do I know any reaſon againſt it, but that which makes a Lilly white, may alſo be the cauſe of the whiteneſs of Snow, that is, ſuch a figure as makes a white colour; for different figures, in my opinion, are the cauſe of different colours, as you will find in my Book of Philoſophy, where I ſay, that Nature by contraction of lines draws ſuch or ſuch a Figure, which is ſuch or ſuch a Colour; as ſuch a Fgure is red, and ſuch a Figure is green, and ſo of all the reſt: But the Paleſt

leſt colours, and ſo white, are the looſeſt and ſlackeſt figures; Indeed, white, which is the neareſt colour to light, is the ſmootheſt, eveneſt and ſtraighteſt figure, and compoſed of the ſmalleſt lines: As for example; ſuppoſe the figure of 8. were the colour of Red, and the figure of 1. the colour of White; or ſuppoſe the figure of Red to be a *z*. and the figure of an *r*. to be the figure of Green, and a ſtraight *l*. the figure of White; And mixt figures make mixt colours: The like examples may be brought of other Figures, as of a Harpſichord and its ſtrings, a Lute and its ſtrings, a Harp and its ſtrings, *&c.* By which your Reaſon ſhall judg, whether it be not eaſier for Nature, to make Snow and its whiteneſs by the way of contraction, then by the way of diſſolution: As for example; Nature in making Snow, contracts or congeals the exterior figure of Water into the figure of a Harp, which is a Triangular figure with the figure of ſtraight ſtrings within it; for the exterior figure of the Harp repreſents the exterior figure of Snow, and the figure of the ſtrings extended in ſtraight lines repreſent the figure of its whiteneſs. And thus it is eaſier to make Snow and its whiteneſs at one act, then firſt to contract or congeal water into Ice, and then to cauſe wind and cold air to beat and break that Ice into powder, and laſtly to contract or congeal that powder into flakes of Snow: Which would be a very troubleſom work for Nature, *viz.* to produce one effect by ſo many violent actions and ſeveral labours, when the making of two figures by one action will ſerve the turn. But Nature is wiſer then any of her Creatures can conceive; for ſhe knows how to make, and how to diſſolve, form, and transform, with facility and eaſe, without

without any difficulty; for her actions are all eaſie and free, yet ſo ſubtil, curious and various, as not any part or creature of Nature can exactly or throughly trace her ways, or know her wiſdom. And thus leaving her, I reſt,

MADAM,

Your faithful Friend

and Servant.

XV.

MADAM,

I Have taken ſeveral queſtions out of your new *Author*, which I intend to anſwer in this preſent Letter according to the conceptions of my own ſenſe and reaſon, and to ſubmit them to your cenſure; which if you vouchſafe to grant me without partiality, I ſhall acknowledg my ſelf much obliged to you for this favour. The firſt queſtion is, *Why wet Linnen is dried in the Air?* I anſwer; That, according to my ſenſe and reaſon, the water which is ſpred upon the linnen, being not united in a full and cloſe body, dilates beyond the Circle-degree of water and wetneſs, and ſo doth eaſily change from water to vapour, and from vapour to air, whereby the linnen becomes as dry, as it was before it became wet. The ſecond queſtion is, *Why Water and Wine intermix ſo eaſily and ſuddenly together?* I anſwer: All wet liquors, although their

exterior figures do differ, yet their interior natures, figures and forms are much alike, and thoſe things that are of the ſame interior nature, do eaſily and ſuddenly joyn as into one: Wherefore Wine and Water having both wet natures, do ſoon incorporate together, whereas, were they of different natures, they would not ſo peaceably joyn together, but by their contrary natures become enemies, and ſtrive to deſtroy each other; but this is to be obſerved, that the ſharp points of the Circle-lines of Wine, by paſsing through the ſmooth Circle-lines of Water, help to make a more haſty and ſudden conjunction. The third queſtion, is, *Why Light, which in its nature is white, ſhining through a coloured Glaſs, doth appear of the ſame colour which the Glaſs is of, either Blew, Green, Red, or the like?* I anſwer: The reaſon is, that though Light in its nature be white, and the Glaſs clear and tranſparent, yet when as the Glaſs is ſtained or painted with colours, both the clearneſs of the glaſs, and the whiteneſs of the light, is obſtructed by the figure of that colour the glaſs is ſtained or painted withal, and the light ſpreading upon or thorow the glaſs, repreſents it ſelf in the figure of that ſame colour; indeed, in all probability to ſenſe and reaſon, it appears, that the lines or beams of light, which are ſtraight, ſmall, even, and parallel, do contract in their entrance through the glaſs into the figure of the colour the glaſs is ſtained or painted with, ſo that the light paſſes through the glaſs figuratively, in ſo much, as it ſeems to be of the ſame colour the glaſs is of, although in it ſelf it is white, lucent, and clear; and as the light appears, ſo the eye receives it, if the light be not deſtructive. The fourth queſtion, is, *Whether* (as

your

your *Authors* opinion is) *kiſſes feel pleaſing and delightful by the thinneſs of the parts, and a gentle ſtirring and quavering of the tangent ſpirits, that give a pleaſing tact?* I anſwer: If this were ſo, then all kiſſes would be pleaſing, which ſurely are not; for ſome are thought very diſpleaſing, eſpecially from thin lips; wherefore, in my opinion, it is neither the thinneſs of the parts of the lips, nor the quavering of the tangent ſpirits, but the appetites and paſsions of life, reaſon, and ſoul, that cauſe the pleaſure: Nevertheleſs, I grant, the ſtirring up of the ſpirits may contribute to the increaſing, heightning, or ſtrengthning of that tact, but it is not the prime cauſe of it. The fifth queſtion, is, *Whether the greateſt man have always the greateſt ſtrength?* I anſwer, Not: for ſtrength and greatneſs of bulk doth not always conſiſt together, witneſs experience: for a little man may be, and is oftentimes ſtronger then a tall man. The like of other animal Creatures: As for example, ſome Horſes of a little or middle ſize, have a great deal more ſtrength then others which are high and big; for it is the quantity of ſenſitive matter that gives ſtrength, and not the bigneſs or bulk of the body. The ſixth queſtion, is, *Whether this World or Univerſe be the biggeſt Creature?* I anſwer: It is not poſsible to be known, unleſs Man could perfectly know its dimenſion or extenſion, or whether there be more Worlds then one: But, to ſpeak properly, there is no ſuch thing as biggeſt or leaſt in Nature. The ſeventh queſtion, is, *Whether the Earth be the Center of Matter, or of the World?* As for Matter, it being Infinite, has no Center, by reaſon it has no Circumference; and, as for this World, its Center cannot be known, unleſs

man

man knew the utmoſt parts of its circumference, for no Center can be known without its circumference; and although ſome do imagine this world ſo little, that in compariſon to Infinite Matter, it would not be ſo big as the leaſt Pins head, yet their knowledg cannot extend ſo far as to know the circumference of this little World; by which you may perceive the Truth of the old ſaying, Man talks much, but knows little. The eighth queſtion is, *Whether all Centers muſt needs be full, and cloſe, as a ſtufft Cuſhion; and whether the matter in the Center of the Univerſe or World be denſe, compact, and heavy?* I anſwer: This can no more be known, then the circumference of the World; for what man is able to know, whether the Center of the world be rare, or denſe, ſince he doth not know where its Center *is*; and as for other particular Centers, ſome Centers may be rare, ſome denſe, and ſome may have leſs matter then their circumferences. The ninth queſtion is, *Whether Finite Creatures can be produced out of an Infinite material cauſe?* I anſwer: That, to my ſenſe and reaſon, an Infinite cauſe muſt needs produce Infinite effects, though not in each Particular, yet in General; that is, Matter being Infinite in ſubſtance, muſt needs be dividable into Infinite parts in number, and thus Infinite Creatures muſt needs be produced out of Infinite Matter; but Man being but a finite part, thinks all muſt be finite too, not onely each particular Creature, but alſo the Matter out of which all Creatures are produced, which is corporeal Nature. Nevertheleſs, thoſe Infinite effects in Nature are equalized by her different motions which are her different actions; for it is not *non-*ſence, but moſt demonſtrable to ſenſe and reaſon,

reaſon that there are equalities or a union in Infinite. The tenth queſtion is, *Whether the Elements be the onely matter out of which all other Creatures are produced?* I anſwer: The Elements, as well as all other Creatures, as it appears to humane ſenſe and reaſon, are all of one and the ſame Matter, which is the onely Infinite Matter; and therefore the Elements cannot be the Matter of all other Creatures, for ſeveral ſorts of Creatures have ſeveral ways of productions, and I know no reaſon to the contrary, but that Animals, Vegetables, and Minerals, may as well derive their eſſence from each other, as from the Elements, or the Elements from them; for as all Creatures do live by each other, ſo they are produced from each other, according to the ſeveral ways or manners of productions. But miſtake me not, *Madam*, for I ſpeak of production in General, and not of ſuch natural production whereby the ſeveral ſpecies of Creatures are maintained: As for example, Generation in Animals; for an Element cannot generate an Animal in that manner as an Animal can generate or produce its like; for as Nature is wiſe, ſo her actions are all wiſe and orderly, or elſe it would make a horrid confuſion amongſt the Infinite parts of Nature. The eleventh queſtion is, *What is meant by Natural Theology?* I anſwer: Natural Theology, in my opinion, is nothing elſe but Moral Philoſophy; for as for our belief, it is grounded upon the Scripture, and not upon Reaſon.

Theſe, *Madam*, are the Queſtions which I have pickt out of your new *Author*, together with my anſwers, of which I deſire your impartial Judgment: But I muſt add one thing more before I conclude: which is,

I am much pleaſed with your *Authors* opinion, That Sound may be perceived by the Eye, Colour by the Ear, and that Sound and Colour may be ſmell'd and taſted; and I have been of this opinion eleven years ſince, as you will find in my Book of Poems, whoſe firſt Edition was printed in the Year, 1653. And thus I take my leave of you, and remain conſtantly,

MADAM,

Your Faithful Friend

to ſerve you.

XVI.

MADAM,

CONcerning your queſtion of the aſcending nature of fire, I am abſolutely of *Ariſtotle's* Opinion, that it is as natural for Fire to aſcend, as it is for Earth to deſcend; And why ſhould we believe the nature of one, and doubt the nature of the other? For if it be granted, that there are as well aſcending, as deſcending bodies in Nature, as alſo low and high places, (according to the ſituation of Particulars) and Circumferences, as well as Centers, (conſidering the ſhape of bodies) I cannot perceive by humane reaſon, but that the Nature of fire is aſcending, and that it is very improbable, it ſhould have a deſcending or contracting nature, as to tend or endeavour to a Center. But, *Madam*, give me leave to aſk what ſort of Fire

you

you mean, whether a Celeſtial, or a Terreſtrial Fire, *viz.* that which is named an Elemental fire, or any other ſort of fire? for there may be as many ſeveral ſorts of fire, as of other Creatures; or whether you mean onely that ſort of fire that belongs to this terreſtrial Globe, or all the fire in general that is in Infinite Nature? and if you mean onely that ſort of fire which belongs to this Terreſtrial World we live upon; I anſwer, There are many ſeveral ſorts of that fire too; for all the fire *belonging* to this Earthly Globe, doth not lie in one place, body, or part, no more then all metal, or but one ſort of metal, as *Gold*, lies in one mine, or all Mankind in one womb. Neither can I believe, that the Sun is the onely Celeſtial Fire in Nature, but that there may be as numerous Suns, as there are other ſorts of Creatures in Nature. But as for the aſcending propriety of this terreſtrial Fire, you may ſay, That the Elements do commix and unite in this worldly Globe, and if Fire ſhould have an aſcending motion, it would pierce into other Globes, or Worlds, and never leave aſcending. I anſwer: That, firſt of all, the ſtrength of fire is to be conſidered, conſiſting not onely in its quantity, but alſo in its quality; as whether it can aſcend to thoſe bodies and places which are far above it: For example; A Man, or any other Creature, hath never ſo much ſtrength, or ability, or length of life, as to travel to the utmoſt parts of the Univerſe, were the way never ſo plain and free, and the number of men never ſo great: the like for Elementary fire, which hath life and death, that is, generation and diſſolution, and ſucceſsive motion, as well as other Creatures. But you would fain know, whether fire, if it were left at liberty,

would

would not turn to a Globous figure? I anſwer; That, to my ſenſe and reaſon, it would not: but ſome men, ſeeing the flame of fire in an arched Oven, deſcend round the ſides of the Oven in a Globous figure, do perhaps imagine the nature of fire to be deſcending, and its natural figure round as a Globe, which is ridiculous; for the fire in the Oven, although every where incompaſſed and bound, yet, according to *its* nature, aſcends to the top of the Oven; and finding a ſtoppage and ſuppreſsion, offers *to* deſcend perpendicularly; but by reaſon of a continual aſcending of the following flame, *the* firſt, and ſo all the *following* parts of flame are forced to ſpread about, and deſcend round the ſides of the Oven, ſo that the deſcenſion of the flame is forced, and not natural, and *its Globous* figure is cauſed, as it were, by a mould, which is the Oven. But ſome are of opinion, that all bodies have deſcending motions towards the Center of this worldly Globe, and therefore they do not believe, that any bodies do aſcend naturally: But what reaſon have they to believe one, and not the other? Beſides, how do they know that all bodies would reſt in the Center of this terreſtriaal Globe, if they came thither? For if it was poſsible, that a hole could be digged from the ſuperficies of this Earthly Globe thorow the middle or Center of it unto the oppoſite ſuperficies, and a ſtone be ſent thorow; the queſtion is, whether the ſtone would reſt in the Center, and not go quite thorow? Wherefore this is but an idle Fancy; and the proof that Fire tends not to a Center, is, becauſe *it* cannot be poiſed or weighed, not onely by reaſon of its rarity, but of its dilative and aſpiring Nature; and

as

as fire is aſcending, or aſpiring, ſo likewiſe do I, *Madam*, aſpire to the top of your favour, and ſhall never deſcend from the ambition to ſerve you, but by the ſuppreſsion of death. Till then, I remain,

MADAM,

Your conſtant Friend,

and faithful Servant.

XVII.

MADAM,

IN your laſt, you were pleaſed to deſire my anſwer to theſe following Queſtions: Firſt, *What the reaſon is, that a Veſſel, although it be of a ſolid and compact ſubſtance, yet will retain the ſmell or odour of a foreign ſubſtance poured into it, for a long time?* I anſwer: The Veſſel, or rather the perceptive corporeal motions of the Veſſel, having patterned out the figure of the ſent of the odorous ſubſtance, retain that ſame figure of ſent, although the odorous ſubſtance is gone; and as long as that patterned figure is perfect, the ſent will remain in the Veſſel, either more or leſs, according as the figure doth laſt or alter. But you muſt conſider, *Madam*, that although it be the natural motions that make thoſe patterns of odours, yet thoſe patterned figures are but as it were artificial, like as a man who draws a Copy from an Original; for Nature has divers and ſeveral ways of ſuch motions as we call Art,

for whatſoever is an imitation, is that which man calls Art. Your ſecond queſtion was, *How it came, that the mind and underſtanding in many did die or diſſolve before the body?* I anſwer: The reaſon is, becauſe the rational corporeal motions alter before the ſenſitive; for as in ſome, as for example, in Natural fools, the rational motions never move to a regular humane underſtanding, ſo in ſome dying Perſons they do make a general alteration before the ſenſitive. Your third queſtion was, *Why a man, being bitten by a mad Dog, is onely diſtempered in his mind, and not in his body?* The reaſon, according to my judgment, is, that the rational part of Matter is onely diſturbed, and not the ſenſitive. The fourth queſtion was, *Why a Baſilisk will kill with his eyes?* I anſwer: It is the ſenſitive corporeal motions in the organ of ſight in the man, which upon the printing of the figure of the eyes of the Baſilisk; make a ſudden alteration. Your fifth queſtion was, *Why an Aſp will kill inſenſibly by biting?* The reaſon, in my opinion, is, That the biting of the Aſp hath the ſame efficacy as deadly *Opium* hath, yea, and much ſtronger. Your ſixth queſtion was, *Why a Dog that rejoyces, ſwings his tail, and a Lyon when angry, or a Cat when in a fear, do lift up their tails?* I anſwer: The ſeveral motions of the mind may produce either but one, or ſeveral ſorts of motions in ſome part or parts of the body; and as the ſenſitive motions of anger will produce tears, ſo will the motions of joy; but grief made by the rational motions of the mind, may by exceſs diſturb and make a general alteration of the ſenſitive motions in an animal: the ſame may exceſsive joy. But, *Madam*, you may perhaps find out better reaſons for your own queſtions

then

then theſe are; for my endeavour was onely to frame my anſwer to the ground of my own opinions, and ſo to ſatisfie your deſire, which was, and is ſtill the ambition of,

MADAM,

Your faithful Friend

and Servant.

XVIII.

MADAM,

IN your laſt, you were pleaſed to deſire an account, how far, or how much I did underſtand the ancient and modern Philoſophers in their Philoſophical Writings. Truly, *Madam*, I can more readily tell you what I do not underſtand, then what I do underſtand: for, firſt, I do not underſtand their ſophiſtical Logick, as to perſwade with arguments that black is white, and white is black; and that fire is not hot, nor water wet, and other ſuch things; for the glory in Logick is rather to make doubts, then to find truth; indeed, that Art now is like thick, dark clouds, which darken the light of truth. Next: I do not underſtand in particular, what they mean by ſecond matter; for if they name figures and forms ſecond matter, they may as well ſay, all ſeveral motions, which are the ſeveral actions of Nature, are ſeveral matters, and ſo there would be infinite ſeveral matters, which would pro-

duce

duce a meer confuſion in Nature. Neither do I underſtand, when they ſay, a body diſſolves into the firſt matter; for I am not able to conceive their firſt matter, nor what they mean by *magna* and *major materia*; for I believe there is but one matter, and the motion of that matter is its action by which it produces ſeveral figures and effects; ſo that the nature of the matter is one and the ſame, although its motions, that is, its actions, be various, for the various effects alter not the nature or unity of the onely matter. Neither do I underſtand what they mean by corruption, for ſurely Nature is not corruptible. Nor do I underſtand their individables in Nature, nor a bodileſs form, nor a privation, nor a being without a body; nor any ſuch thing as they call reſt, for there's not any thing without motion in Nature: Some do talk of moving *minima's*, but they do not tell what thoſe *minima's* or their motions are, or how they were produced, or how they came to move. Neither do I underſtand when they ſay there is but one World, and that finite; for if there be no more Matter then that which they call the whole World, and may be meaſured by a *Jacob's* ſtaff, then certainly there is but little matter, and that no bigger then an atome in compariſon to Infinite. Neither can my reaſon comprehend, when they ſay, that not any thing hath power from its interior nature to move exteriouſly and locally; for common ſenſe and reaſon, that is ſight and obſervation, doth prove the contrary. Neither do I know what they mean by making a difference between matter and form, power and act; for there can be no form without matter, nor no matter without form; and as act

includes

includes power, ſo power is nothing without act: Neither can I conceive Reaſon to be ſeparable from matter; nor what is meant when they ſay, that, onely that is real, which moves the underſtanding without. Nor do I underſtand what they mean by intentionals, accidentals, incorporeal beings, formal *ratio*, formal *unity*, and hundreds the like; enough to puzle truth, when all is but the ſeveral actions of one cauſe, to wit, the onely matter. But moſt men make ſuch croſs, narrow, and intricate ways in Nature, with their over-nice diſtinctions, that Nature appears like a Labyrinth, whenas really ſhe is as plain as an un-plowed, ditched, or hedged champion: Nay, ſome make Nature ſo full, that ſhe can neither move nor ſtir; and others again will have her ſo empty, as they leave not any thing within her; and ſome with their penetrations, preſsings, ſqueezings, and the like, make ſuch holes in her, as they do almoſt wound, preſs and ſqueeze her to death: And ſome are ſo learned, witty, and ingenious, as they underſtand and know to diſcourſe of the true compaſs, juſt weight, exact rules, meaſures and proportions of the Univerſe, as alſo of the exact diviſion of the *Chaos*, and the architecture of the world, to an atome. Thus, *Madam*, I have made my confeſsion to you of what I underſtand not, and have endeavoured to make my ignorance as brief as I could; but the great God knows, that my ignorance is longer then that which is named life and death; and as for my underſtanding, I can onely ſay, that I underſtand nothing better, but my ſelf to be,

MADAM,

Your moſt faithful Friend

and humble Servant.

M A

XIX.

MADAM,

SInce I have given you, in my laſt, an account how much I did underſtand the Philoſophical works of both the ancient and modern Philoſophers, or rather what I did not underſtand of them, you would fain have my opinion now of the perſons themſelves. Truly, *Madam*, as for thoſe that are dead, or thoſe that are living; I cannot ſay any thing, but that I believe they all were or are worthy perſons, men of vaſt underſtandings, ſubtil conceptions, ingenious wits, painful ſtudents, and learned writers. But as for their works, as I told you heretofore, I confeſs ingeniouſly, I underſtand them not, by reaſon I am ignorant in their Scholaſtical Arts, as Logick, Metaphyſick, Mathematicks, and the like: For to my ſimple apprehenſion, when as Logicians argue of natural cauſes and effects, they make natural cauſes to produce natural effects with more difficulty and enforcement then Nature knows of; and as for Mathematicians, they endeavour to inchant Nature with Circles, and bind her with lines ſo hard, as if ſhe were ſo mad, that ſhe would do ſome miſchief, when left at liberty. Geometricians weigh Nature to an Atome, and meaſure her ſo exactly, as leſs then a hairs breadth; beſides, they do preſs and ſqueeze her ſo hard and cloſe, as they almoſt ſtifle her. And Natural Philoſophers do ſo ſtuff her with dull, dead, ſenceleſs *minima's*, like as a ſack with meal, or ſand, by which they

they raiſe ſuch a duſt as quite blinds Nature and natural reaſon. But Chymiſts torture Nature worſt of all, for they extract and diſtil her beyond ſubſtance, nay, into no ſubſtance, if they could. As for natural Theologers, I underſtand them leaſt of any; for they make ſuch a gallamalfry of Philoſophy and Divinity, as neither can be diſtinguiſhed from the other. In ſhort, *Madam*, They all with their intricate definitions and diſtinctions ſet my brain on the rack: but ſome Philoſophers are like ſome Poets, for they endeavour to write ſtrong lines. You may ask me, what is meant by ſtrong lines? I anſwer: Weak ſenſe. To which leaving them, I reſt,

MADAM,

Your Faithful Friend

and Servant.

XX.

MADAM,

I Am not of your opinion, That nice diſtinctions and Logiſtical arguments diſcover truth, diſſolve doubts, and clear the underſtanding; but I ſay, they rather make doubts of truth, and blind-fold the underſtanding; Indeed, nice diſtinctions and ſophiſtical arguments, are very pernicious both in Schools, Church, and State: As for the Church, although in Divinity there is but one Truth, yet nice diſtinctions, and Logiſtical

ſtical ſophiſtry, have made ſuch confuſion in it, as has cauſed almoſt as many ſeveral opinions as there are words in the Scripture; and as for natural Theology, which is moral Philoſophy, they have divided vertues and vices into ſo many parts, and minced them ſo ſmall, that neither can be clearly diſtinguiſhed. The ſame in Government; they endeavour to cut between command and obedience to a hairs breadth. Concerning cauſes of Law, they have aboliſh'd the intended benefit, and baniſh'd equity; and *inſtead* of keeping Peace, they make War, cauſing enmity betwixt men: As for Natural *Philoſophy*, they will not ſuffer *ſenſe and reaſon* to appear in that ſtudy: And as for Phyſick, they have kill'd more men then Wars, Plagues, or Famine. Wherefore from nice diſtinctions and *Logiſtical ſophiſtry*, Good God deliver us, eſpecially, from thoſe that concern Divinity; for they weaken Faith, trouble Conſcience, and bring in Atheiſm: In ſhort, they make controverſies, and endleſs diſputes. But leaſt the opening of my meaning in ſuch plain terms ſhould raiſe a controverſie alſo between you and me, I'le cut off here, and reſt,

MADAM,

Your faithful Friend

and Servant.

MA-

XXI.

MADAM,

YEſterday I received a viſit from the Lady *N. M.* who you know hath a quick wit, rational opinions, and ſubtil conceptions; all which ſhe is ready and free to divulge in her diſcourſe. But when ſhe came to my Chamber, I was caſting up ſome ſmall accounts; which when ſhe did ſee, What, ſaid ſhe, are you at Numeration? Yes, ſaid I: but I cannot number well, nor much, for I do not underſtand Arithmetick. Said ſhe, You can number to three. Yes, ſaid I, I can number to four: Nay, faith, ſaid ſhe, the number of three is enough, if you could but underſtand that number well, for it is a myſtical number. Said I, There is no great myſtery to count that number; for one, and two, makes three. Said ſhe, That is not the myſtery; for the myſtery is, That three makes one: and without this myſtery no man can underſtand Divinity, Nature, nor himſelf. Then I deſired her to make me underſtand that myſtery. She ſaid, It required more time to inform me, then a ſhort viſit, for this myſtery was ſuch, as did puzle all wiſe men in the world; aud the not underſtanding of this myſtery perfectly, had cauſed endleſs diviſions and diſputes. I deſired, if ſhe could not make me underſtand the myſtery, ſhe would but inform me, how three made one in Divinity, Nature, and Man. She ſaid, That was eaſie to do; for in Divinity there are three

Perſons in one Eſſence, as God the Father, the Son, and the holy Ghoſt, whoſe Eſſence being individable, they make but one God; And as for Philoſophy, there is but Matter, Motion, and Figure, which being individable, make but one Nature; And as for Man, there is Soul, Life, and Body, all three joyned in one Man. But I replied, Man's Life, Soul and Body, is dividable. That is true, ſaid ſhe, but then he is no more a Man; for theſe three are his eſſential parts, which make him to be a man; and when *theſe parts* are diſſolved, then his interior nature *is changed*, ſo that he can no longer be call'd a *man*: As for example; Water being turned *into Air*, and having loſt *its* interior nature, can no more be called Water, but it is perfect Air; the ſame is with Man: But as long as he is a Man, *then* theſe three forementioned *parts which make* him to be of that figure are individably united as long as man laſts. Beſides, ſaid ſhe, this is but in the particular, conſidering man ſingle, and by himſelf; but in general, theſe three, as life, ſoul, and body, are individably united, ſo that they remain as long as mankind laſts. Nay, although they do diſſolve in the particulars, yet it *is but* for a time; *for they* ſhall be united again at the laſt *day*, which *is* the time of their reſurrection; ſo that alſo in this reſpect we may juſtly call them *individable*, for man ſhall remain with an united ſoul, life, and body, eternally. And as ſhe was thus diſcourſing, in came a Sophiſterian, whom when ſhe ſpied, away ſhe went as faſt as ſhe could; but I followed her cloſe, and got hold of her, then asked her, why ſhe ran away? She anſwer'd, if ſhe ſtayed, the Logician would diſſolve her into nothing, for the profeſsion of Logicians is to

make

make ſomething nothing, and nothing ſomething. I pray'd her to ſtay and diſcourſe with the Logician: Not for a world, ſaid ſhe, for his diſcourſe will make my brain like a confuſed *Chaos*, full of ſenſeleſs *minima's*; and after that, he will ſo knock, jolt, and jog it, and make ſuch whirls and pits, as will ſo torture my brain, that I ſhall wiſh I had not any: Wherefore, ſaid ſhe, I *will* not ſtay now, but viſit you again to morrow. And I wiſh with all my heart, *Madam*, you were ſo near as to be here at the ſame time, that we three might make a Triumvirate in diſcourſe, as well as we do in friendſhip. But ſince that cannot be, I muſt reſt ſatisfied that I am

MADAM,

Your faithful Friend

and Servant.

XXII.

MADAM,

YOu were pleaſed to deſire my opinion of the works of that Learned and Ingenious Writer *B.* Truly, *Madam*, I have read but ſome part of his works; but as much as I have read, I have obſerved, he is a very civil, eloquent, and rational Writer; the truth is, his ſtyle is a Gentleman's ſtyle. And in particular, concerning his experiments, I muſt needs ſay this, that, in my judgment, he hath expreſſed himſelf

ſelf to be a very induſtrious and ingenious perſon; for he doth neither puzle Nature, nor darken truth with hard words and compounded languages, or nice diſtinctions; beſides, his experiments are proved by his own action. But give me leave to tell you, that I obſerve, he ſtudies the different parts and alterations, more then the motions, which cauſe the alterations in thoſe parts; whereas, did he ſtudy and obſerve the ſeveral and different motions in thoſe parts, how they change in one and the ſame part, and how the different alterations in bodies are cauſed by the different motions of their parts, he might arrive to a vaſt knowledg by the means of his experiments; for certainly experiments are very beneficial to man. In the next place, you deſire my opinion of the Book call'd, *The Diſcourſes of the Virtuoſi in France*: I am ſorry, *Madam*, this book comes ſo late to my hands, that I cannot read it ſo ſlowly and obſervingly, as to give you a clear judgment of their opinions or diſcourſes in particular; however, in general, and for what I have read in it, I may ſay, it expreſſes the French to be very learned and eloquent Writers, wherein I thought our Engliſh had exceeded them, and that they did onely excel in wit and ingenuity; but I perceive moſt Nations have of all ſorts. The truth is, ingenious and ſubtil wit brings news; but learning and experience brings proofs, at leaſt, argumental diſcourſes; and the French are much to be commended, that they endeavour to ſpend their time wiſely, honourably, honeſtly, and profitably, not onely for the good and benefit of their own, but alſo of other Nations. But before I conclude, give me leave to tell you, that concerning the curious and profitable

Arts

Arts mentioned in their diſcourſes, I confeſs, I do much admire them, and partly believe they may arrive to the uſe of many of them; but there are two arts which I wiſh with all my heart I could obtain: the firſt is, to argue without error in all kinds, modes, and figures, in a quarter of an hour; and the other is to learn a way to underſtand all languages in ſix hours. But as for the firſt, I fear, if I want a thorow-underſtanding in every particular argument, cauſe, or point, a general art or mode of words will not help me, eſpecially, if I, being a woman, ſhould want diſcretion: And as for the ſecond, my memory is ſo bad, that it is beyond the help of Art, ſo that Nature has made my underſtanding harder or cloſer then Glaſs, through which the Sun of verity cannot paſs, although its light doth; and therefore I am confident I ſhall not be made, or taught to learn this mentioned Art in ſix hours, no not in ſix months. But I wiſh all Arts were as eaſily practiſed, as mentioned; and thus I reſt,

MADAM,

Your faithful Friend

and Servant.

XXIII.

MADAM,

CONcerning your Queſtion, *Whether a Point be ſomething, or nothing, or between both*; My opinion is, that a natural point is material; but that which the learned name a Mathematical point, is like their Logiſtical Egg, whereof there is nothing in Nature any otherwiſe, but a word, which word is material, as being natural; for concerning immaterial beings, it is impoſsible to believe there be any in Nature; and though witty Students, and ſubtil Arguers have both in paſt, and this preſent age, endeavoured to prove ſomething, nothing; yet words and diſputes have not power to annihilate any thing that is in Nature, no more then to create ſomething out of nothing; and therefore they can neither make ſomething, nothing; nor nothing to be ſomething: for the moſt witty ſtudent, nor the ſubtileſt *diſputant*, cannot alter Nature, but each thing is and muſt be as Nature made it. As for your other queſtion, *Whether there be more then five Senſes?* I anſwer: There are as many ſenſes as there are ſenſitive motions, and all ſenſation or perception is by the way of patterning; and whoſoever is of another opinion, is, in my judgment, a greater friend to contradiction, then to truth, at leaſt to probability. Laſtly, concerning your queſtion, why a Gun, the longer its barrel is made, the further it will ſhoot, until it come to a certain degree of length; after which,

the

the longer it is made, the weaker it becomes, ſo that every degree further, makes it ſhoot ſhorter and ſhorter, whereas before it came to ſuch a degree of length, it ſhot further and further: Give me leave to tell you, *Madam*, that this queſtion would be put more properly to a Mathematician, then to me, who am ignorant in the Mathematicks: However, ſince you are pleaſed to deſire my opinion thereof, I am willing to give it you. There are, in my judgment, but three reaſons which do produce this alteration: The one may be the compaſs of the ſtock, or barrel, which being too wide for the length, may weaken the force, or being too narrow for the length, may retard the force; the one giving liberty before the force is united, the other incloſing it ſo long by a ſtreight paſſage, as it loſes its force before it hath liberty; ſo that the one becomes ſtronger with length, the other weaker with length. The ſecond reaſon, in my opinion, is, That degrees of ſtrength may require degrees of the *medium*. Laſtly, It may be, that Centers are required for degrees of ſtrength; if ſo, every *medium* may be a Center; and the middle length to ſuch a compaſs may be a Center of ſuch a force. But many times the force being weaker or ſtronger, is cauſed by the good or ill making of the Powder, or Locks, or the like. But, *Madam*, ſuch queſtions will puzle me as much as thoſe of M^r *V. Z.* concerning thoſe glaſſes, one of which being held cloſe in ones hand, and a little piece being broke of its tail, makes as great a noiſe as the diſcharging of a Gun: Wherefore I beſeech you, *Madam*, do not trouble my brain with Mathematical queſtions, wherein I have neither skill, learning, nor experience

by

by Practice; for truly I have not the ſubtilty to find out their myſtery, nor the capacity to underſtand arts, no more then I am capable to learn ſeveral languages. If you command me any thing elſe I am able to do, aſſure your ſelf, there is none ſhall more readily and cheerfully ſerve you then my ſelf; who am, and ſhall ever continue,

MADAM,

Your Faithful Friend

and Servant.

XXIV.

MADAM,

I Have heard that Artiſts do glory much in their Glaſſes, Tubes, Engines, and Stills, and hope by their Glaſſes and Tubes to ſee inviſible things, and by their Engines to produce incredible effects, and by their Stills, Fire, and Furnaces, to create as Nature doth; but all this is impoſsible to be done: For Art cannot arrive to that degree, as to know perfectly Natures ſecret and fundamental actions, her pureſt matter, and ſubtileſt motions; and it is enough if Artiſts can but produce ſuch things as are for mans conveniencies and uſe, although they never can ſee the ſmalleſt or rareſt bodies, nor great and vaſt bodies at a great diſtance, nor make or create a Vegetable, Animal, or the like, as Nature doth; for Nature being Infinite, has alſo Infinite degrees

degrees of figures, ſizes, motions, denſities, rarities, knowledg, *&c.* as you may ſee in my Book of Philoſophy, as alſo in my book of Poems, eſpecially that part that treats of little, minute Creatures, which I there do name, for want of other expreſsions, Fairies; for I have conſidered much the ſeveral ſizes of Creatures, although I gave it out but for a fancy in the mentioned book, leſt I ſhould be thought extravagant to declare that conception of mine for a rational truth: But *if* ſome ſmall bodies cannot be perfectly ſeen but by the *help* of magnifying glaſſes, and ſuch as they call Microſcopia; I pray, Nature being Infinite, What figures and ſizes may there not be, which our eyes with all the help of Art are not capable to ſee? for certainly, Nature hath more curioſities then our exterior ſenſes, helped by Art, can perceive: Wherefore I cannot wonder enough at thoſe that pretend to know the leaſt or greateſt parts or creatures in Nature, ſince no particular Creature is able to do it. But concerning Artiſts, you would fain know, *Madam*, whether the Artiſt be beholden to the conceptions of the Student? To which I return this ſhort anſwer: That, in my judgment, without the Students conceptions, the Artiſt could not tell how to make experiments: The truth is, the conceptions of ſtudious men ſet the Artiſts on work, although many Artiſts do ungratefully attribute all to their own induſtry. Neither doth it always belong to the ſtudious Conceptor to make trials or experiments, but he leaves that work to others, whoſe time is not ſo much imployed with thoughts or ſpeculations, as with actions; for

the Contemplator is the Deſigner, and the Artiſt the Workman, or Labourer, who ought to acknowledg him his Maſter, as I do your *Ladiſhip*, for I am in all reſpects,

MADAM,

Your Ladiſhips

humble and faithful Servant.

XXV.

MADAM,

YOur Command in your laſt was to ſend you my opinion concerning the diviſion of Religions, or of the ſeveral opinions in Religions, I ſuppoſe you mean the diviſion of the Religion, not of Religions; for certainly, there is but one divine Truth, and conſequently but one true Religion: But natural men being compoſed of many divers parts, as of ſeveral motions and figures, have divers and ſeveral Ideas, which the groſſer corporeal motions conceive to be divers and ſeveral gods, as being not capable to know the Great and Incomprehenſible God, who is above Nature. For example: Do but conſider, *Madam*, what ſtrange opinions the Heathens had of God, and how they divided him into ſo many ſeveral Perſons, with ſo many ſeveral bodies, like men; whereas, ſurely God conſidered in his Eſſence, he being a Spirit, as the Scripture deſcribes him, can neither have Soul nor body, as he

is a God, but is an Immaterial Being; Onely the Heathens did conceive him to have parts, and ſo divided the Incomprehenſible God into ſeveral Deities, at leaſt they had ſeveral Deitical Ideas, or rather Fancies of him. But, *Madam*, I confeſs my ignorance in this great myſtery, and honour, and praiſe the Omnipotent, Great, and Incomprehenſible God, with all fear and humility as I ought; beſeeching his infinite mercy to keep me from ſuch preſumption, whereby I might prophane his holy Name, and to make me obedient to the Church, as alſo to grant me life and health, that I may be able to expreſs how much I am,

MADAM,

Your Faithful Friend

and Servant.

XXVI.

MADAM,

SInce I ſpake of Religion in my laſt, I cannot but acquaint you, that I was the other day in the company of Sir *P. H.* and Sir *R. L.* where amongſt other diſcourſes they talk'd of Predeſtination and Free-will. Sir *P. H.* accounted the opinion of Predeſtination not onely abſurd, but blaſphemous; for, ſaid he, Predeſtination makes God appear Cruel, as firſt to create Angels and Man, and then to make them fall from their Glory, and damn them eternally: For God, ſaid he, knew

knew before he made them, they would fall; Neither could he imagine, from whence that Pride and Preſumption did proceed, which was the cauſe of the Angels fall; for it could not proceed from God, God being infinitely Good. Sir *R. L.* anſwer'd, That this Pride and Preſumption did not come from God, but from their own Nature. But, replyed Sir *P. H.* God gave them that Nature, for they had it not of themſelves, but all what they were, their Eſſence and Nature, came from God the Creator of all things, and to ſuffer that, which was in his power to hinder, was as much as to act. Sir *R. L.* ſaid, God gave both Angels and Man a Free-will at their Creation. Sir *P. H.* anſwered, that a Free-will was a part of a divine attribute, which ſurely God would not give away to any Creature: Next, ſaid he, he could not conceive why God ſhould make Creatures to croſs and oppoſe him; for it were neither an act of Wiſdom to make Rebels, nor an act of Juſtice to make Devils; ſo that neither in his Wiſdom, Juſtice, nor Mercy, God could give leave, that Angels and Man ſhould fall through ſin; neither was God ignorant that Angels and Man would fall; for ſurely, ſaid he, God knew all things, paſt, preſent, and to come: wherefore, ſaid he, Free-will doth weaken the Power of God, and Predeſtination doth weaken the power of man, and both do hinder each other: Beſides, ſaid he, ſince God did confirm the reſt of the Angels in the ſame ſtate they were before, ſo as they could not fall afterwards, he might as well have created them all ſo at firſt. But Sir *R. L.* replied, That God ſuffered Angels and Man to fall for his Glory, to ſhew his

Juſtice

Juſtice in Devils, and his Mercy in Man; and that the Devils expreſs'd God's Omnipotency as much as the Bleſſed. To which Sir *P. H.* anſwered, That they expreſſed more God's ſeverity in thoſe horrid torments they ſuffer through their Natural Imperfections, then his power in making and ſuffering them to ſin. Thus they diſcourſed: And to tell you truly, *Madam*, my mind was more troubled, then delighted with their diſcourſe; for it ſeemed rather to detract from the honour of the great God, then to increaſe his Glory; and no Creature ought either to think or to ſpeak any thing that is detracting from the Glory of the Creator: Wherefore I am neither for Predeſtination, nor for an abſolute Free-will, neither in Angels, Devils, nor Man; for an abſolute Free-will is not competent to any Creature: and though Nature be Infinite, and the Eternal Servant to the Eternal and Infinite God, and can produce Infinite Creatures, yet her Power and Will is not abſolute, but limited; that is, ſhe has a natural free-will, but not a ſupernatural, for ſhe cannot work beyond the power God has given her. But thoſe myſtical diſcourſes belong to Divines, and not to any Lay-perſon, and I confeſs my ſelf very ignorant in them. Wherefore I will nor dare not diſpute God's actions, being all infinitely wiſe, but leave that to Divines, who are to inform us what we ought to believe, and how we ought to live. And thus taking my leave of you for the preſent, I reſt,

MADAM,

Your faithful Friend

and Servant.

XXVII.

MADAM,

YOu are pleaſed to honor me ſo far, that you do *not* onely ſpend ſome time in the peruſing of my Book called *Philoſophical Opinions, but take* it ſo much into your conſideration, as to examine every opinion of mine which diſſents from the common way of the Schools, marking thoſe places which ſeem ſomewhat obſcure, and deſiring my explanation of them; All which, I do not onely acknowledg as a great *favour*, but as an infallible teſtimony of your true and unfeigned friendſhip; and I cannot chuſe but publiſh it to all the world; both for the honour of your ſelf, as to let every body know the part of ſo true a friend, who is ſo much concerned for the honour and benefit of my poor Works; as alſo for the good of my mentioned Book, which by this means will be rendred more intelligible; for I muſt confeſs that my Philoſophical Opinions are not ſo plain and perſpicuous as to be perfectly underſtood at the firſt reading, which I am ſorry for. And there be two chief reaſons why they are ſo: Firſt, Becauſe they are new, and never vented before; for they have their original meerly from my own conceptions, and are not taken out of other Philoſophers. Next, becauſe I being a Woman, and not bred up to Scholarſhip, did want names and terms of Art, and therefore being not verſed in the Writings of other Philoſophers

but what I knew by hearing, I could not form my named Book ſo methodically, and expreſs my opinions ſo artificially and clearly, as I might have done, had I been ſtudious in the reading of Philoſophical Books, or bred a Scholar; for then I might have dreſſed them with a fine coloured Covering of Logick and Geometry, and ſet them out in a handſome array; by which I might have alſo cover'd my ignorance, like as Stage-Players do cover their mean perſons or degrees with fine Cloathes. But, as I ſaid, I being void of Learning and Art; did put them forth according to my own conceptions, and as I did underſtand them my ſelf; but ſince I have hitherto by the reading of thoſe famous and learned *Authors* you ſent me, attained to the knowledg of ſome artificial Terms, I ſhall not ſpare any labour and pains to make my opinions ſo intelligible, that every one, who without partiality, ſpleen, or malice, doth read them, may alſo eaſily underſtand them: And thus I ſhall likewiſe endeavour to give ſuch anſwers to your ſcruples, objections, or queſtions, as may explain thoſe paſſages which ſeem obſcure, and ſatisfie your deſire. In the firſt place, and in general, you deſire to know, *Whether any truth may be had in Natural Philoſophy*: for ſince all this ſtudy *is* grounded upon probability, and he that thinks he has the moſt probable reaſons for his opinion, may be as far off from truth, as he who *is* thought to have the leaſt; nay, what ſeems moſt probable to day, may ſeem leaſt probable to morrow, eſpecially if an ingenious oppoſer, bring rational arguments againſt it: Therefore you think it is but vain for any one to trouble his brain with ſearching and enquiring after ſuch things wherein neither truth nor certainty can

be

be had. To which, I anſwer: That the undoubted truth in Natural Philoſophy, is, in my opinion, like the Philopher's Stone in Chymiſtry, which hath been ſought for by many learned and ingenious Perſons, and will be ſought as long as the Art of Chymiſtry doth laſt; but althongh they cannot find the Philoſophers Stone, yet by the help of this Art they have found out many rare things both for uſe and knowledg. The like in Natural Philoſophy, although *Natural Philoſophers* cannot find out the abſo*lute* truth of Nature, or Natures ground-*works*, or the hidden cauſes of natural effects; neverthelſs they have found out many neceſſary and profitable Arts and Sciences, to benefit the life of man; for without *Natural Philoſophy* we ſhould have lived *in dark* ignorance, not knowing the motions of the Heavens, the cauſe of the Eclipſes, the influences of the Stars, the uſe of Numbers, Meaſures, and Weights, the vertues and effects of Vegetables and Minerals, the Art of Architecture, Navigation, and the like: Indeed all Arts and Sciences do adſcribe their original to the ſtudy of Natural Philoſophy; and *thoſe* men are both unwiſe and ungrateful; that will refuſe rich gifts becauſe they cannot be maſters of *all* Wealth; and they are fools, that will not take remedies when they are ſick, becauſe Medicines can onely recover them from death for a time, but not make them live for ever. But to conclude, Probability is next to truth, and the ſearch of a hidden cauſe finds out viſible effects; and this truth do natural Philoſophers find, that there are more fools, then wiſe-

men, which fools will never attain to the honour of be-ing Natural Philoſophers. And thus leaving them, reſt,

MADAM,

Your Ladiſhips

humble and faithful Servant.

XXVIII.

MADAM,

YOur deſire is to know, ſince I ſay Nature is Wiſe, Whether all her parts muſt be wiſe alſo? To which, I anſwer; That (by your favour) all her parts are not fools: but yet it is no neceſſary conſequence, that becauſe Nature is infinitely wiſe, all her parts muſt be ſo too, no more then if I ſhould ſay, Nature is Infinite, therefore every part muſt be Infinite: But it is rather neceſſary, that becauſe Nature is Infinite, therefore not any ſingle part of hers can be Infinite, but muſt be finite. Next, you deſire to know, Whether Nature or the ſelf-moving matter is ſubject to err, and to commit miſtakes? I anſwer: Although Nature has naturally an Infinite wiſdom and knowledg, yet ſhe has not a moſt pure and intire perfection, no more then ſhe has an abſolute power; for a moſt pure and intire perfection belongs onely to God: and though ſhe is infinitely naturally wiſe in her ſelf, yet her parts or particular creatures may commit errors and miſtakes:

the truth is, it is impoſsible but that parts or particular Creatures muſt be ſubject to errors, becauſe no part can have a perfect or general knowledg, as being but a part and not a whole; for knowledg is in parts, as parts are in Matter: Beſides ſeveral corporeal motions, that is, ſeveral ſelf-moving parts do delude and oppoſe each other by their oppoſite motions; and this oppoſition is very requiſite in Nature to keep a mean, and hinder extreams; for were there not oppoſition of parts, Nature would run into extreams, which would confound her, and all her parts. And as for deluſion, it is part of Natures delight, cauſing the more variety; but there be ſome actions in Nature which are neither perfect miſtakes, nor deluſions, but onely want of a clear and thorow perception: As for example; when a man is ſailing in a Ship, he thinks the ſhore moves from the ſhip, when as it is the ſhip that moves from the ſhore: Alſo when a man is going backward from a Looking-glaſs; he thinks, the figure in the Glaſs goeth inward, whereas it is himſelf that goes backward, and not his figure in the glaſs. The cauſe of it is, That the perception in the eye perceives the diſtanced body, but not the motion of the diſtance or medium; for though the man may partly ſee the motion of the viſible parts, yet he doth not ſee the parts or motion of the diſtance or medium, which is inviſible, and not ſubject to the perception of ſight; and ſince a pattern cannot be made if the object be not viſible, hence I conclude, that the motion of the medium cannot make perception, but that it is the perceptive motions of the eye, which pattern out an object as it is viſibly preſented to the corporeal motions in the eye; for according as the object is

preſented

preſented, the pattern is made, if the motions be regular: For example; a fired end of a ſtick, if you move it in a circular figure, the ſenſitive corporeal motions in the eye pattern out the figure of fire, together with the exterior or circular motion, and apprehend it as a fiery circle; and if the ſtick be moved any otherwiſe, they pattern out ſuch a figure as the fired end of the ſtick is moved in; ſo that the ſenſitive pattern is made according to the exterior corporeal figurative motion of the object, and not according to its interior figure or motions. And this, *Madam*, is in ſhort my anſwer to your propounded queſtions, by which, I hope, you underſtand plainly the meaning of,

MADAM,

Your Faithful Friend

and Servant.

XXIX.

MADAM,

THe ſcruples or queſtions you ſent me laſt, are theſe following. Firſt, you deſire to be informed what I mean by *Phantaſmes* and *Ideas*? I anſwer: They are figures made by the pureſt and ſubtileſt degree of ſelf-moving matter, that is to ſay, by the rational corporeal motions, and are the ſame with thoughts or conceptions. Next, your queſtion is, what I do underſtand by *Senſitive Life*? I anſwer:

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It is that part of ſelf-moving matter, which in its own nature is not ſo pure and ſubtil as the rational, for it is but the labouring, and the rational the deſigning part of matter. Your third queſtion is, *Whether this ſenſitive ſelf-moving matter be denſe or rare?* I anſwer: denſity and rarity are onely effects cauſed by the ſeveral actions, that is, the corporeal motions of Nature; wherefore it cannot properly be ſaid, that ſenſitive matter is either denſe, or rare; for it has a ſelf-power to contract and dilate, compoſe and divide, and move in any kind of motion whatſoever, as is requiſite to the framing of any figure; and thus I deſire you to obſerve well, that when I ſay the rational part of matter is purer in its degree then the ſenſitive, and that this is a rare and acute matter, I do not mean that it is thin like a rare egg, but that it is ſubtil and active, penetrating and dividing, as well as dividable. Your fourth queſtion is, *What this ſenſitive matter works upon?* I anſwer: It works with and upon another degree of matter, which is not ſelf-moving, but dull, ſtupid, and immoveable in its own nature, which I call the inanimate part or degree of matter. Your fifth queſtion is, *Whether this inanimate Matter do never reſt?* I anſwer; It doth not: for the ſelf-moving matter being reſtleſs in its own nature, and ſo cloſely united and commixed with the inanimate, as they do make but one body, will never ſuffer it to reſt; ſo that there is no part in Nature but is moving; the animate matter in it ſelf, or its own nature, the inanimate by the help or means of the animate. Your ſixth queſtion is, *If there be a thorow mixture of the parts of animate and inanimate matter, whether thoſe parts do retain each their own na-*

ture and ſubſtance, ſo that the inanimate part of matter remains dull and ſtupid in its eſſence or nature, and the animate full of ſelf-motion, or all ſelf motion? I anſwer: Although every part and particle of each degree are cloſely intermixed, nevertheleſs this mixture doth not alter the interior nature of thoſe parts or degrees: As for example; a man is compoſed of Soul, and Body, which are ſeveral parts, but joyned as into one ſubſtance, *viz.* Man, and yet they retain each their own proprieties and natures; for although ſoul and body are ſo cloſely united as they do make but one Man, yet the ſoul doth not change into the body, nor the body into the ſoul, but each continues in its own nature as it is. And ſo likewiſe in Infinite Matter, although the degrees or parts of Matter are ſo throughly intermixed as they do make but one body or ſubſtance, which is corporeal Nature, yet each remains in its nature as it is, to wit, the animate part of matter doth not become dull and ſtupid in its nature, but remains ſelf-moving; and the inanimate, although it doth move by the means of the animate, yet it doth not become ſelf-moving, but each keeps its own interior nature and eſſence in their commixture. The truth is, there muſt of neceſsity be degrees of matter, or elſe there would be no ſuch various and ſeveral effects in Nature, as humane ſenſe and reaſon do perceive there are; and thoſe degrees muſt alſo retain each their own nature and proprieties, to produce thoſe various and curious effects: Neither muſt thoſe different degrees vary or alter the nature of Infinite Matter; for Matter muſt and doth continue one and the ſame in its Nature, that is, Matter cannot be divided from be-

ing Matter: And this is my meaning, when I ſay in my *Philoſophical Opinions*, *There is but one kind of Matter*: Not that Matter is not dividable into ſeveral parts or degrees, but I ſay, although Matter has ſeveral parts and degrees, yet they do not alter the nature of Matter, but Matter remains one and the ſame in its own kind, that is, it continues ſtill Matter in its own nature notwithſtanding thoſe degrees; and thus I do exclude from Matter all that which is not Matter, and do firmly believe, that there can be *no* commixture of Matter and no Matter in Nature; for this would breed a meer confuſion in Nature. Your ſeventh queſtion is, *Whether that, which I name the rational part of ſelf-moving Matter makes as much variety as the ſenſitive?* To which I anſwer: That, to my ſenſe and reaſon, the rational part of animate or ſelf-moving Matter moves not onely more variouſly, but alſo more ſwiftly then the ſenſitive; for thoughts are ſooner made, then words ſpoke, and a certain proof of it are the various and ſeveral Imaginations, Fancies, Conceptions, Memories, Remembrances, Underſtandings, Opinions, Judgments, and the like: as alſo the ſeveral ſorts of Love, Hate, Fear, Anger, Joy, Doubt; and the like Paſsions. Your eighth queſtion is; *Whether the Senſitive Matter can and doth work in it ſelf and its own ſubſtance and degree?* My anſwer is, That there is no inanimate matter without animate, nor no animate without inanimate, both being ſo curiouſly and ſubtilly intermixt, as they make but one body; Nevertheleſs the ſeveral parts of this one body may move ſeveral ways. Neither are the ſeveral degrees bound to an equal mixture, no more then the ſeveral parts

of one body are bound to one and the ſame ſize, bigneſs, ſhape, or motion; or the Sea is bound to be always at the high tide; or the Moon to be always at the full; or all the Veins or Brains in animal bodies are bound to be of equal quantity; or every Tree of the ſame kind to bear fruit, or have leaves of equal number; or every Apple, Pear, or Plum, to have an equal quantity of juice; or every Bee to make as much honey and wax as the other. Your nineth queſtion is, *Whether the Senſitive Matter can work without taking patterns?* My anſwer is, That all corporeal motion is not patterning, but all patterning is made by corporeal motion; and there be more ſeveral ſorts of corporeal motions then any ſingle Creature is able to conceive, much leſs to expreſs: But the perceptive corporeal motions are the ground-motions in Nature, which make, rule, and govern all the parts of Nature, as to move to Production, or Generation, Transformation, and the like. Your tenth queſtion is, *How it is poſsible, that numerous figures can exiſt in one part of matter? for it is impoſsible that two things can be in one place, much leſs many.* My anſwer in ſhort is, That it were impoſsible, were a part of Matter, and the numerous figures ſeveral and diſtinct things; but all is but one thing, that is, a part of Matter moving variouſly; for there is neither Magnitude, Place, Figure, nor Motion, in Nature, but what is Matter, or Body; Neither is there any ſuch thing as Time: Wherefore it cannot properly be ſaid, *There was*, and *There ſhall be*; but onely, *There is*. Neither can it properly be ſaid, from this to that place; but onely in reference

reference to the ſeveral moving parts of the onely Infinite Matter. And thus much to your Queſtions; I add no more, but reſt,

MADAM,

Your faithful Friend

and humble Servant.

XXX.

MADAM,

IN your laſt, you were pleaſed to expreſs, *that ſome men, who think themſelves wiſe, did laugh in a ſcornful manner at my opinion, when I ſay that every* Creature hath life and knowledg, ſenſe and reaſon; counting it not onely ridiculous, but abſurd; and asking, whether you did or could believe, a piece of wood, metal, or ſtone, had as much ſenſe as a beaſt, or as much reaſon as a man, having neither brain, blood, heart, nor fleſh; nor ſuch organs, paſſages, parts, nor ſhapes as animals? To which, I anſwer: That it is not any of theſe mentioned things that makes life and knowledg, but life and knowledg is the cauſe of them, which life and knowledg is animate matter, and is in all parts of all Creatures: and to make it more plain and perſpicuous, humane ſenſe and reaſon may perceive, that wood, ſtone, or metal, acts as wiſely as an animal: As for example; Rhubarb, or the like drugs, will act very wiſely in Purging; and Antimony, or the like,

like, will act very wiſely in Vomiting; and Opium will act very wiſely in Sleeping; alſo Quickſilver or Mercury will act very wiſely, as thoſe that have the French diſeaſe can beſt witneſs: likewiſe the Loadſtone acts very wiſely, as Mariners or Navigators will tell you: Alſo Wine made of Fruit, and Ale of Malt, and diſtilled Aqua-vitæ will act very ſubtilly; ask the Drunkards, and they can inform you; Thus Infinite examples may be given, and yet man ſays, all Vegetables and Minerals are inſenſible and irrational, as alſo the Planets and Elements; when as yet the Planets move very orderly and wiſely, and the Elements are more active, nay, more ſubtil and ſearching then any of the animal Creatures; witneſs Fire, Air, and Water: As for the Earth, ſhe brings forth her fruit, if the other Elements do not cauſe abortives, in due ſeaſon; and yet man believes, Vegetables, Minerals, and Elements, are dead, dull, ſenſeleſs, and irrational Creatures, becauſe they have not ſuch ſhapes, parts, nor paſſages as Animals, nor ſuch exterior and local motions as Animals have: but Man doth not conſider the various, intricate and obſcure ways of Nature, unknown to any particular Creature; for what our ſenſes are not capable to know, our reaſon is apt to deny. Truly, in my opinion, Man is more irrational then any of thoſe Creatures, when he believes that all knowledg is not onely confined to one ſort of Creatures, but to one part of one particular Creature, as the head, or brain of man; for who can in reaſon think, that there is no other ſenſitive and rational knowledg in Infinite Matter, but what is onely in Man, or animal Creatures? It is a

very ſimple and weak concluſion to ſay, Other Creatures have no eyes to ſee, no ears to hear, no tongues to taſte, no noſes to ſmell, as animals have; wherefore they have no ſenſe or ſenſitive knowledg; or becauſe they have no head, nor brain as Man hath, therefore they have no reaſon, nor rational knowledg at all: for ſenſe and reaſon, and conſequently ſenſitive and rational knowledg, extends further then to be bound to the animal eye, ear, noſe, tongue, head, or brain; but as theſe organs are onely in *one kind* of Natures Creatures, as Animals, *in which* organs the ſenſitive corporeal motions make the perception of exterior objects, ſo there may be infinite other kinds of paſſages or organs in other Creatures unknown to Man, which Creatures may have their ſenſe and reaſon, *that is*, ſenſitive and rational knowledg, each according to the nature of its figure; for as it is abſurd to ſay, that all Creatures in Nature are Animals, ſo it is abſurd to confine ſenſe and reaſon onely to Animals; or to ſay, that all other Creatures, if they have ſenſe and reaſon, life and knowledg, it muſt be the ſame as is in Animals: I confeſs, it is of the ſame degree, that is, of the ſame animate part of matter, but the motions of life and knowledg work ſo differently and variouſly in every *kind* and ſort, nay, in every particular Creature, that no ſingle Creature can find them out: But, in my opinion, not any Creature is without life and knowledg, which life and knowledg is made by the ſelf-moving part of matter, that is, by the ſenſitive and rational corporeal motions; and as it is no conſequence, that all Creatures muſt be alike in their exterior ſhapes, figures, and motions, becauſe they are all produced out of one and the

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ſame matter, ſo neither doth it follow, that all Creatures muſt have the ſame interior motions, natures, and proprieties, and ſo conſequently the ſame life and knowledg, becauſe all life and knowledg is made by the ſame degree of matter, to wit, the animate. Wherefore though every kind or ſort of Creatures has different perceptions, yet they are not leſs knowing; for Vegetables, Minerals, and Elements, may have as numerous, and as various perceptions as Animals, and they may be as different from animal perceptions as their kinds are; but a different perception is not therefore no perception: Neither is it the animal organs that make perception, nor the animal ſhape that makes life, but the motions of life make them. But ſome may ſay, it is Irreligious to believe any Creature has rational knowledg but Man. Surely, *Madam*, the God of Nature, in my opinion, will be adored by all Creatures, and adoration cannot be without ſenſe and knowledg. Wherefore it is not probable, that onely Man, and no Creature elſe, is capable to adore and worſhip the Infinite and Omnipotent God, who is the God of Nature, and of all Creatures: I ſhould rather think it irreligious to confine ſenſe and reaſon onely to Man, and to ſay, that no Creature adores and worſhips God, but Man; which, in my judgment, argues a great pride, ſelf-conceit, and preſumption. And thus, *Madam*, having declared my opinion plainly concerning this ſubject, I will detain you no longer at this preſent, but reſt,

MADAM,

Your conſtant Friend

and faithful Servant.

MA-

XXXI.

MADAM,

I Perceive you do not well apprehend my meaning, when I ſay in my *Philoſophical Opinions* *, *That the Infinite degrees of Infinite Matter are all Infinite*: For, ſay you, the degrees of Matter cannot be Infinite, by reaſon there cannot be two Infinites, but one would obſtruct the other. My anſwer is; I do not mean that the degrees of Matter are Infinite each in its ſelf, that is, that the animate and inanimate are ſeveral Infinite matters, but my opinion is, that the animate degree of matter is in a perpetual motion, and the inanimate doth not move of it ſelf, and that thoſe degrees are infinite in their effects, as producing and making infinite figures; for ſince the cauſe, which is the onely matter, is infinite, the effects muſt of neceſsity be infinite alſo; the cauſe is infinite in its ſubſtance, the effects are Infinite in number. And this is my meaning, when I ſay *, that, although in Nature there is but one kind of matter, yet there are Infinite degrees, Infinite motions, and Infinite parts in that onely matter; and though Infinite and Eternal matter has no perfect or exact figure, by reaſon it is Infinite, and therefore unlimited, yet there being infinite parts in number, made by the infinite variations of motions in infinite Matter, theſe parts have perfect or exact figures, conſidered as parts, that is, ſingle, or each in its particular figure: And therefore if there be Infinite degrees, conſidering

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the effects of the animate and inanimate matter, infinite motions for changes, infinite parts for number, infinite compoſitions and diviſions for variety and diverſity of Creatures; then there may alſo be infinite ſizes, each part or figure differing more or leſs, infinite ſmalneſs and bigneſs, lightneſs and heavineſs, rarity and denſity, ſtrength and power, life and knowledg, and the like: But by reaſon Nature or Natural matter is not all animate or inanimate, nor all compoſing or dividing, there can be no Infinite in a part, nor can there be ſomething biggeſt or ſmalleſt, ſtrongeſt or weakeſt, heavieſt or lighteſt, ſofteſt or hardeſt in Infinite Nature, or her parts, but all thoſe ſeveral *Infinites* are as it were included in one Infinite, which is Corporeal Nature, or Natural Matter.

Next, you deſire my opinion of *Vacuum*, whether there be any, or not? for you ſay I determine nothing of it in my Book of *Philoſophical Opinions*. Truly, *Madam*, my ſenſe and reaſon cannot believe a *Vacuum*, becauſe there cannot be an empty Nothing; but change of motion makes all the alteration of figures, and conſequently all that which is called place, magnitude, ſpace, and the like; for matter, motion, figure, place, magnitude, *&c.* are but one thing. But ſome men perceiving the alteration, but not the ſubtil motions, believe that bodies move into each others place, which is impoſsible, becauſe ſeveral places are onely ſeveral parts, ſo that, unleſs one part could make it ſelf another part, no part can be ſaid to ſucceed into anothers place; but it is impoſsible that one part ſhould make it ſelf another part, for it cannot be another, and it ſelf, no more then Nature can be Nature, and not Nature;

wherefore change of place is onely change of motion, and this change of motion makes alteration of Figures.

Thirdly, you ſay, You cannot underſtand what I mean by Creation, for you think that Creation is a production or making of Something out of Nothing. To tell you really, *Madam*, this word is uſed by me for want of a better expreſsion; and I do not take it in ſo ſtrict a ſenſe as to underſtand by it, a Divine or ſupernatural Creation, which onely belongs to God; but a natural Creation, that is, a natural production or Generation; for Nature cannot create or produce Something out of Nothing: And this Production may be taken in a double ſence; Firſt, in General, as for example, when it is ſaid, that all Creatures are produced out of Infinite Matter; and in this reſpect every particular Creature which is finite, that is, of a circumſcribed and limited figure, is produced of Infinite Matter, as being a part thereof: Next, Production is taken in a more ſtrict ſenſe, to wit, when one ſingle Creature is produced from another; and this is either Generation properly ſo called, as when in every kind and ſort each particular produces its like; or it is ſuch a Generation whereby one creature produces another, each being of a different kind or ſpecies, as for example, when an Animal produces a Mineral, as when a Stone is generated in the Kidneys, or the like; and in this ſence one finite creature generates or produces another finite creature, the producer as well as the produced being finite; but in the firſt ſence finite creatures are produced out of infinite matter.

Fourthly, you confeſs, You cannct well apprehend my

my meaning, when I ſay *, that the ſeveral kinds are as Infinite as the particulars; for your opinion is, That the number of particulars muſt needs exceed the number of kinds. I anſwer: I mean in general the Infinite effects of Nature which are Infinite in number, and the ſeveral kinds or ſorts of Creatures are Infinite in duration, for nothing can periſh in Nature. * *Part.* 4. *c.* 10.

Fifthly, When I ſay, that aſcending and deſcending is often cauſed by the exterior figure or ſhape of a body; witneſs a Bird, who although he is of a much bigger ſize and bulk then a Worm, yet can by his ſhape *lift* himſelf up more agilly and nimbly then a Worm; Your opinion is, That his exterior ſhape doth not contribute any thing towards his flying, by reaſon a Bird being dead retains the ſame ſhape, but yet cannot fly at all. But, truly, *Madam*, I would not have you think that I do exclude the proper and interior natural motion of the figure of a Bird, and the natural and proper motions of every part and particle thereof; for that a Bird when dead, keeps his ſhape, and yet cannot fly, the reaſon is, that the natural and internal motions of the Bird, and the Birds wings, are altered towards ſome other ſhape or figure, *if* not exteriouſly, yet interiouſly; but yet the interior natural motions could not effect any flying or aſcending without the help of the exterior ſhape; for a Man, or any other animal, may have the ſame interior motions as a Bird hath, but wanting ſuch an exterior ſhape, he cannot fly; whereas had he wings like a Bird, and the interior natural motions of thoſe wings, he might without doubt fly as well as a Bird doth. * *Ch.* 20.

Sixthly, Concerning the deſcent of heavy bodies, *Ch.* 21.

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that it is more forcible then the aſcent of light bodies, you do queſtion the Truth of this my opinion. Certainly, *Madam*, I cannot conceive it to be otherwiſe by my ſenſe and reaſon; for though Fire that is rare, doth aſcend with an extraordinary quick motion, yet this motion is, in my opinion, not ſo ſtrong and piercing as when groſſer parts of Creatures do deſcend; but there is difference in ſtrength and quickneſs; for had not Water a ſtronger motion, and another ſort of figure then Fire, it could not ſuppreſs Fire, much leſs quench it. But Smoak, which is heavier then Flame, flies up, or riſes before, or rather, above it: Wherefore I am ſtill of the ſame opinion, that heavy bodies deſcend more forcibly then light bodies do aſcend, and it ſeems moſt rational to me.

Laſtly, I perceive you cannot believe that all bodies have weight; by reaſon, if this were ſo, the Sun, and the Stars would have long ſince cover'd the Earth. In anſwer to this objection, I ſay, That as there can be no body without figure and magnitude, ſo conſequently not without weight, were it no bigger then an atome; and as for the Sun's and the Stars not falling down, or riſing higher, the reaſon is, not their being without weight, but their natural and proper motion, which keeps them conſtantly in their ſpheres; and it might as well be ſaid, a Man lives not, or is not, becauſe he doth not fly like a Bird, or dive and catch fiſh like a Cormorant, or dig and undermine like a Mole, for thoſe are motions not proper to his nature. And theſe, *Madam*, are my anſwers to your objections, which if they do ſatisfie you, it is all I deſire, if not, I ſhall endeavour hereafter to make my meaning more intelligible

gible, and ſtudy for other more rational arguments then theſe are, to let you ſee how much I value both the credit of my named Book, and your *Ladiſhips* Commands; which aſſure your ſelf, ſhall never be more faithfully performed, then by

MADAM,

Your Ladiſhips moſt obliged Friend

and humble Servant.

XXXII.

MADAM,

SInce my opinion is, that the Animate part of Matter, which is ſenſe and reaſon, life and knowledg, is the deſigner, architect, and creator of all figures in Nature; you deſire to know, whence this Animate Matter, ſenſe and reaſon, or life and knowledg (call it what you will, for it is all one and the ſame thing) is produced? I anſwer: *It is* eternal. But then you ſay, it *is* coequal *with* God. I anſwer, That cannot be: for God *is* above all Natural ſenſe and reaſon, which *is* Natural life and knowledg; and therefore it cannot be coequal with God, except it be meant in Eternity, as being without beginning and end. But if Gods Power can make Man's Soul, as alſo the good and evil Spirits to laſt eternally without end, he may, by his Omnipotency make as well things without beginning. You will ſay, If Nature were Eternal, it

could not be created, for the word Creation is contrary to Eteanity. I anſwer, *Madam*, I am no Scholar for words; for if you will not uſe the word Creation, you may uſe what other word you will; for I do not ſtand upon nice words and terms, ſo I can but expreſs my conceptions: Wherefore, if it be (as in Reaſon it cannot be otherwiſe) that nothing in Nature can be annihilated, nor any thing created out of nothing, but by Gods ſpecial and all-powerful Decree *and* Command, then Nature muſt be as God *has* made her, until he deſtroy her. But if Nature be not Eternal, then the Gods of the Heathens were made in time, and were no more *then* any other Creature, which is as ſubject to be deſtroyed as created; for they conceived their Gods, as we do men, to have Material Bodies, but an *Immaterial* Spirit, or as ſome Learned men imagine, to be an Immaterial Spirit, but to take ſeveral ſhapes, and ſo to perform ſeveral corporeal actions; which truly is too humble and mean a conception of an Immaterial Being, much more of the Great and Incomprehenſible God; which I do firmly believe is a moſt pure, all-powerful Immaterial Being, which doth all things by his own Decree and Omnipotency without any Corporeal actions or ſhapes, ſuch as ſome fancy of Dæmons and the like Spirits. But to return to the former queſtion; you might as well enquire how the world, or any part of it was created, or how the variety of creatures came to be, as ask how Reaſon and ſenſitive corporeal Knowledg was produced. Nevertheleſs, I do conſtantly believe, that both ſenſitive and rational Knowledg in Matter was produced from God; but after what manner or way, is impoſsible for any creature or part of Nature to know,

for.

for Gods wayes are incomprehenſible and ſupernatural. And thus much I believe, That as God is an Eternal Creator, which no man can deny, ſo he has alſo an Eternal Creature, which is Nature, or natural Matter. But put the caſe Nature or natural Matter was made when the World was created, might not God give this Natural Matter ſelf-motion, as well as he gave ſelf-motion to Spirits and Souls? and might not God endue this Matter with Senſe and Reaſon, as well as he endued Man? Shall or can we bind up Gods actions with our weak opinions and fooliſh arguments? Truly, if God could not act more then Man is able to conceive, he were not a God of an infinite Power; but God is Omnipotent, and his actions are infinite, ſupernatural, and paſt finding out; wherefore he is rather to be admired, adored and worſhipped, then to be unglorioufly diſcourſed of by vain and ambitious men, whoſe fooliſh pride and preſumption drowns their Natural Judgment and Reaſon: to which leaving them, I reſt,

XXXIII.

MADAM,

IN obedience to your commands, I here ſend you alſo an explanation and clearing of thoſe places and paſſages in my Book of Philoſophy, which in your laſt Letter you were pleaſed to mark, as containing ſome obſcurity and difficulty of being underſtood.

Part. 3. c. 13. First, When I ſay, *Nature is an Individable Matter*, I do not mean as if Nature were not dividable into parts; for becauſe Nature is material, therefore ſhe muſt alſo needs be dividable into parts: But my meaning is, that Nature cannot be divided from Matter, nor Matter from Nature, that is, Nature cannot be Immaterial, nor no part of Nature, but if there be any thing Immaterial, it doth not belong to Nature. Alſo when I call Nature a *Multiplying Figure*; I mean, that Nature makes infinite changes, and ſo infinite figures.

Part. 1. c. 11. Next, when I ſay, *There are Infinite Diviſions in Nature*; my meaning is not, that there are Infinite diviſions of one ſingle part, but that Infinite Matter has Infinite parts, ſizes, figures, and motions, all being but one Infinite Matter, or corporeal Nature. Alſo when I ſay ſingle parts, I mean not parts ſubſiſting by themſelves, preciſed from each other, but ſingle, that is, ſeveral or different, by reaſon of their different figures. Likewiſe, when I name Atomes, I mean ſmall parts of Matter; and when I ſpeak of Place

and

and Time, I mean onely the variation of corporeal figurative motions.

Again: when I ſay, *Nature has not an abſolute Power, becauſe ſhe has an Infinite power*; I mean by *abſolute*, as much as finite, or circumſcribed; and in this ſenſe Nature cannot have an abſolute power, for the Infiniteneſs hinders the abſoluteneſs; but when in my former Letters I have attributed an abſolute Power onely to God, and ſaid that Nature has not an abſolute power, but that her power, although it be Infinite, yet cannot extend beyond Nature, but is an Infinite natural power; I underſtand by an abſolute Power, not a finite power, but ſuch a power which onely belongs to God, that is, a ſupernatural and divine power, which power Nature cannot have, by reaſon ſhe cannot make any part of her body immaterial, nor annihilate any part of her Creatures, nor create any part that was not in her from Eternity, nor make her ſelf a Deity; for though God can impower her with a ſupernatural gift, and annihilate her when he pleaſes, yet ſhe is no ways able to do it her ſelf. Part. 1. c. 13. 14.

Moreover, when I ſay, *That one Infinite is contained within another*; I mean, the ſeveral ſorts of Infinites, as Infinite in number, Infinite in duration; as alſo the Infinite degrees, motions, figures, ſizes, compoſitions, diviſions, *&c.* all which are contained in the Infinite body of Nature, which is the onely Infinite in quantity or ſubſtance, neither can the parts of Nature go beyond Infinite. P. 1. c. 8

Alſo when I ſay, *That Matter would have power over Infinite, and Infinite over Matter, and Eternal over both*; I mean, that ſome corporeal actions endeavour P. 6. c. 3

to be more powerful then others, and thus the whole ſtrives to over-power the parts, and the parts the whole: As for example, if one end of a ſtring were tied about the little finger of ones hand, and the other end were in the power of the other whole hand, and both did pull ſeveral and oppoſite ways, certainly, the little finger would endeavour to over-power the hand, and the hand again would ſtrive to over-power the little finger: The ſame may be ſaid of two equal figures, as two hands, and other the like examples may be given. And this is alſo my meaning, when I ſay, that ſome ſhapes have power over others, and ſome degrees and temperaments of matter over others; whereby I underſtand nothing elſe, but that ſome parts have power over others. Alſo when I ſay*, that outward things govern, and a Creature has no power over it ſelf, I mean, that which is ſtronger, by what means ſoever, is ſuperior in power.

When I ſay*, That *the Animate part of Matter is not ſo groſs an Infinite as the Inanimate*, I do not attribute an Infiniteneſs to a part, as if animate matter conſidered as a part were infinite; but my meaning is, that the Animate matter produces infinite effects: For, it being the Deſigner, Architect, and Creator of all Figures, as alſo the Life and Soul of all Creatures, it muſt needs be infinite in its effects, as alſo infinite in its duration. But you may object, That a part cannot produce infinite effects. I anſwer, It is true, if animate matter ſhould be conſidered in it ſelf without the inanimate, it could not produce infinite effects, having nothing to work upon and withal; but becauſe there is ſuch a cloſe and inſeparable conjunction of thoſe parts

of matter, as they make but one body, and that Infinite, none can be or work without the other, but both degrees of matter, which make but one infinite Nature, are required in the production of the infinite effects and figures in Nature: Nevertheleſs, ſince the Animate part of Matter is the onely architect, creator, or producer of all thoſe effects, by reaſon it is the ſelf-moving part, and the Inanimate is onely the inſtrument which the Animate works withal, and the materials it works upon, *the* Production of the infinite effects in Nature is more fitly aſcribed to the Animate then the Inanimate part of matter; as for example, If an architect ſhould build an houſe, certainly he can do *nothing* without materials, neither can the materials raiſe themſelves to ſuch a figure as a houſe without the help of the architect and workmen; but both are of neceſsity required to this artificial production; nevertheleſs, the building of the houſe is not laid to the materials, but to the architect: the ſame may be ſaid of animate and inanimate matter in the production of natural effects. Again, you may reply, That the animate and inanimate parts of matter are but two parts, and the number of Two is but a finite number, wherefore they cannot make one infinite body, ſuch as I call Nature or natural Matter. I anſwer, *Madam*, I confeſs, that a finite number is not nor cannot make an infinite number; but I do not ſay, that the animate and inanimate parts or degrees of matter are two finite parts each ſubſiſting by it ſelf as circumſcribed, and having its certain bounds, limits and circumference; for if this were ſo, certainly they being finite themſelves, could not produce but finite effects; but my meaning is, that both the animate and inanimate

matter

matter do make but one Infinite bulk, body, or ſubſtance, and are not two ſeveral and dividable bodies in themſelves, and thus they may be divided not into two, but into Infinite parts; Neither are they two different Matters, but they are but one Matter; for by the animate Matter I do underſtand ſelf-motion; and that I call this ſelf-motion Matter, the reaſon is, that no body ſhall think as if ſelf-motion were immaterial; for my opinion is, that Nature is nothing but meer Matter, and that nothing is in Nature which is a part of Nature, that is not material; wherefore to avoid ſuch a miſapprehenſion (ſeeing that moſt learned men are ſo much for abſtractions and immaterial beings) I called ſelf-motion animate matter, or the animate part of matter; not as if they were two ſeveral matters, but that all is but one natural Matter, or corporeal Nature in one bulk, body, or ſubſtance, juſt like as the ſoul and body do make but one man; and to avoid alſo this miſpapprehenſion, leſt they might be taken for ſeveral matters, I have upon better conſideration, in this volume of *Philoſophical Letters*, call'd the animate matter corporeal ſelf-motion, which expreſsion, I think, is more proper, plain, and intelligible then any other: Neither would I have you to ſcruple at it, when I ſay, that both parts or degrees of animate and inanimate matter do retain their own interior natures and proprieties in their commixture, as if thoſe different natures and proprieties, where one is ſelf-moving, and the other not, did cauſe them to be two different matters; for thus you might ſay as well, that ſeveral figures which have ſeveral and different interior natures and proprieties, are ſo many ſeveral matters. The truth is, if you deſire to have the trueſt expreſsion

of animate and inanimate matter, you cannot find it better then in the definition of Nature, when I ſay, Nature is an infinite ſelf-moving body; where by the body of Nature I underſtand the inanimate matter, and by ſelf-motion the animate, which is the life and ſoul of Nature, not an immaterial life and ſoul, but a material, for both life, ſoul and body are and make but one ſelf-moving body or ſubſtance which is corporeal Nature. And therefore when I call *Animate matter* an *Extract*, I do it by reaſon of its purity, ſubtilty and agility, not by reaſon of its immateriality. Alſo when I name the word Motion by it ſelf, and without any addition, I underſtand corporeal Motion; and when I name Motion, Matter and Figure, I do not mean three ſeveral and diſtinct things, but onely figurative corporeal motion, or figurative ſelf-moving matter, all being but one thing; the ſame when I ſpeak of Place, Time, Magnitude, and the like. P.4.c.3.32.

Concerning Natural Production or Generation; when I ſay, *The ſame matter or figure of the producers doth not always move after one and the ſame manner in producing, for then the ſame producers would produce one and the ſame creature by repetition,* I do not mean the very ſame creature in number, unleſs the ſame motions and parts of matter did return into the producers again, which is impoſsible; but I underſtand the like creature, to wit, that one and the ſame ſort of particular motions would make all particular figures reſemble ſo, as if they were one and the ſame creature without any difference. P.1. c.22.

When I ſay, *Senſitive and Rational knowledg lives in ſenſitive and rational Matter, and Animate liveth in In-* P.3. c.15.

animate matter, I mean they are all ſeveral parts and actions of the onely infinite matter inſeparable from each other; for whereſoever is matter, there is alſo ſelf-motion, and whereſoever is ſelf-motion, there is ſenſe and reaſon, and whereſoever is ſenſe and reaſon, there is ſenſitive and rational knowledge, all being but one body or ſubſtance, which is Nature.

When I ſay, *The death of particular Creatures cauſes an obſcurity of Knowledge, and that particular Knowledges increaſe and decreaſe, and may be more or leſs*, I mean onely that parts divide themſelves from parts, and joyn to other parts; for every ſeveral Motion is a ſeveral Knowledge, and as motion varies, ſo doth knowledge; but there is no annihilation of any motion, and conſequently not of knowledge in Nature. And as for more or leſs knowledge, I mean more or leſs alteration and variety of corporeal figurative motions, not onely rational but ſenſitive, ſo that that creature which has moſt variety of thoſe perceptive motions is moſt knowing, provided they be regular, that is, according to the nature and propriety of the figure, whether animal, vegetable, mineral, or elemental; for though a large figure is capable of moſt knowledge, yet it is not commonly or alwayes ſo wiſe or witty as a leſs, by reaſon it is more ſubject to diſorders and irregularities; like as a private Family is more regular and better ordered then a great State or Common-wealth. Alſo when I ſay, *That ſome particular Knowledge laſts longer then ſome other*, I mean that ſome corporeal motions in ſome parts do continue longer then in others.

When I ſay, *A little head may be full, and a great head may be empty of rational matter*, I mean there may be

be as it were an ebbing or flowing, that is more or leſs of Rational Matter joyned with the Senſitive and Inanimate: And when I ſay, *That, if all the heads of Mankind were put into one, and ſufficient quantity of Rational Matter therein, that Creature would not onely have the knowledge of every particular, but that Underſtanding and Knowledge would increaſe like Uſe-money*, my meaning is, that if there were much of thoſe parts of rational matter joyned, they would make more variety by ſelf-change of corporeal motions.

When I name *Humane ſenſe and reaſon*, I mean ſuch ſenſitive and rational perception and knowledge as is proper to the nature of Man; and when I ſay *Animal ſenſe and reaſon*, I mean ſuch as is proper to the nature of all Animals; for I do not mean that the ſenſitive and rational corporeal motions which do make a man, or any Animal, are bound to ſuch figures eternally, but whileſt they work and move in ſuch or ſuch figures, they make ſuch perceptions as belong to the nature of thoſe figures; but when thoſe ſelf-moving parts diſſolve the figure of an Animal into a Vegetable or any other Creature, then they work according to the nature of that ſame figure, both exterioufly and interioufly.

When I ſay; *That Place, Space, Meaſure, Number, Weight, Figures, &c. are mixed with Subſtance*, I do not mean they are incorporeal, and do inhere in ſubſtance as ſo many incorporeal modes or accidents; but my meaning is, they are all corporeal parts and actions of Nature, there being no ſuch thing in Nature that may be called incorporeal; for Place, Figure, Weight, Meaſure, &c. are nothing without Body, but Place and Body are but one thing, and ſo of

the

C. 14. the reſt. Alſo when I ſay, *That ſometimes Place, ſometimes Time, and ſometimes Number gives advantage*, I mean, that ſeveral parts of Matter are getting or loſing advantage.

P. 5. c. 51. When I ſay, an Animal or any thing elſe that has exterior local motion, goeth or moveth to ſuch or ſuch a place, I mean, to ſuch or ſuch a body; and when ſuch a Creature doth not move out of its place, I mean, it doth not remove its body from ſuch or ſuch parts adjoyning to it.

P. 6. c. 8. When I ſay, *The rational animate matter divides it ſelf into as many parts, and after as many ſeveral manners as their place or quantity will give way to*, I mean their own place and quantity: alſo, as other parts will give way to thoſe parts, for ſome parts will aſſiſt others, and ſome do obſtruct others.

When I ſay, *That the Nature of extenſion or dilation ſtrives or endeavours to get ſpace, ground, or compaſs*, I mean thoſe corporeal motions endeavour to make place and ſpace by their extenſions, that is, to ſpread their parts of matter into a larger compaſs or body. And when I ſay, *That Contractions endeavour to caſt or thruſt out ſpace, place, ground, or compaſs*, My meaning is, That thoſe corporeal motions endeavour to draw their parts of matter into a more cloſe and ſolid body, for there is no place nor ſpace without body.

Alſo when I name ſeveral *tempered ſubſtances and matters*, I mean ſeveral changes and mixtures of corporeal motions.

Alſo when I ſpeak of *Increaſe* and *Decreaſe*, I mean onely an alteration of corporeal figurative motions, as uniting parts with parts, and diſſolving or ſeparating parts from parts.

When

When I ſay, That the motions of cold, and the motions of moiſture, when they meet, make cold and moiſt effects, and when the motions of heat and moiſture meet, make hot and moiſt effects; and ſo for the motions of cold and dryneſs: I mean, that when ſeveral parts do joyn in ſuch ſeveral corporeal motions, they cauſe ſuch effects; and when I ſay cold and heat preſſes into every particular Creature, I mean, that every Creatures natural and inherent perceptive motions make ſuch patterns as their exterior objects are, *viz.* hot or cold, if they do but move regularly, for if they be irregular, then they do not, as for example; thoſe in an Ague will ſhake for cold in a hot Summers day, and thoſe that are in a Fever will burn with heat, although they were at the Poles. P. 5. c. 4.

When I ſay, that hot motions, and burning motions, and hot figures, and burning figures do not aſſociate or joyn together in all Creatures: I mean, that the corporeal motions in ſome figures or creatures, do act in a hot, but not in a burning manner; and when I ſay, ſome creatures have both hot and burning motions and figures, I mean, the corporeal motions act both in a hot and burning manner; for though heat is in a degree to burning, yet it is not always burning, for burning is the higheſt degree of heat, as wetneſs is the higheſt degree of moiſture.

When I ſay, *Warmth feeds other Creatures after a ſpiritual manner, not a corporeal,* My meaning is, not as if heat were not corporeal, but that thoſe corporeal motions which make heat work inviſibly, and not viſibly like as fire feeds on fuel, or man on meat.

Alſo when I ſay, *Excerciſe amongſt animals gets*

ſtrength, I mean, that by excerciſe the inherent natural motions of an animal body are more active, as being more induſtrious.

P. 5. c. 45. When I ſay, *That the paſſage whence cold and ſharp winds do iſſue out, is narrow*, I mean, when as ſuch or ſuch parts disjoyn or ſeparate from other parts; as for example, when dilating parts disjoyn from contracting parts; and oftentimes the disjoyning parts do move according to the nature of thoſe parts they disjoyn from.

Concerning the actions of Nature, my meaning is, that there is not any action whatſoever, but was always in Nature, and remains in Nature ſo long as it pleaſes God that Nature ſhall laſt, and of all her actions Perception and ſelf-love are her prime and chief actions; wherefore it is impoſsible but that all her particular creatures or parts muſt be knowing as well as ſelf-moving, there being not one part or particle of Nature that has not its ſhare of animate or ſelf-moving matter, and conſequently of knowledg and ſelf-love, each according to its own kind and nature; but by reaſon all the parts are of one matter, and belong to one body, each is unalterable ſo far, that although it can change its figure, yet it cannot change or alter from being matter, or a part of Infinite Nature; and this is the cauſe there cannot be a confuſion amongſt thoſe parts of Nature, but there muſt be a conſtant union and harmony betwixt them; for croſs and oppoſite actions make no confuſion, but onely a variety; and ſuch actions which are different, croſs and oppoſite, not moving always after their uſual and accuſtomed way, I name Irregular, for want of a better expreſsion; but properly,

properly there is no ſuch thing as Irregularity in Nature, nor no wearineſs, reſt, ſleep, ſickneſs, death or deſtruction, no more then there is place, ſpace, time, modes, accidents, and the like, any thing beſides body or matter.

When I ſpeak of *unnatural Motions*, I mean ſuch as are not proper to the nature of ſuch or ſuch a Creature, as being oppoſite or deſtructive to it, that is, moving or acting towards its diſſolution. Alſo when I call Violence ſupernatural, I mean that Violence is beyond the particular nature of ſuch a particular Creature, that is, beyond its natural motions, but not ſupernatural, that is beyond Infinite Nature or natural Matter. P. 7. c. 1

When I ſay, *A thing is forced*, I do not mean that the forced body receives ſtrength without Matter; but that ſome Corporeal Motions joyn with other Corporeal Motions, and ſo double the ſtrength by joyning their parts, or are at leaſt an occaſion to make other parts more induſtrious.

By *Prints* I underſtand the figures of the objects which are patterned or copied out by the ſenſitive and rational corporeal figurative Motions; as for example, when the ſenſitive corporeal motions pattern out the figure of an exteriour object, and the rational motions again pattern out a figure made by the ſenſitive motions, thoſe figures of the objects that are patterned out, I name Prints; as for example, *The ſenſe of Seeing is not capable to receive the Print*, that is, the figure or pattern *of the object of the whole Earth*. And again, *The rational Motions are not alwayes exactly after the ſenſitive Prints*, that is, after the figures made by the ſenſitive motions. Thus by Prints I underſtand Patterns, and P. 3. c. 2.

by

by printing patterning; not that the exteriour object prints its figure upon the exteriour ſenſitive organs, but that the ſenſitive motions in the organs pattern out the figure of the object: but though all printing is done by the way of patterning, yet all patterning is not printing. Therefore when I ſay, that *ſolid bodies print*
P. 5. c. 23. *their figures in that which is more porous and ſoft, and that thoſe ſolid bodies make new prints perpetually; and as they remove, the prints melt out, like verbal or vocal ſounds, which print words and ſet notes in the Air*; I mean, the ſoft body by its own ſelf-motion patterns out the figure of the ſolid body, and not that the ſolid body makes its own print, and ſo leaves the place of its own ſubſtance with the print in the ſoft body; for place remains always with its own body, and cannot be ſeparated from it, they being but one thing: for example; when a Seal is printed in Wax, the Seal gives not any thing to the Wax, but is onely an object patterned out by the figurative motions of the Wax in the action of printing or ſealing.

P. 6. c. 13. When I make mention *of what the Senſes bring in*, I mean what the ſenſitive Motions pattern out of forreign objects: And when I ſay, *that the pores being*
P. 7. c. 12. *ſhut, touch cannot enter*, I mean, the ſenſitive corporeal motions cannot make patterns of outward objects.

Alſo when I ſay, *our Ears may be as knowing as our Eyes*, and ſo of the reſt of the ſenſitive organs; I mean the ſenſitive motions in thoſe parts or organs.

P. 6. c. 13. When I ſay, *The more the Body is at reſt, the more active or buſie is the Mind*, I mean when the ſenſitive Motions are not taken up with the action of patterning out forreign objects.

When

When I ſay, the Air is fill'd with ſound, and that words are received into the ears, as figures of exterior objects are received into the eyes, I mean, the ſenſitive motions of the Air pattern out ſound, and the ſenſitive motions of the Ears pattern out words, as the ſenſitive figurative motions of the Eyes pattern out the figures of external objects. P. 6. c. 29.

Alſo when I ſpeak of *Thunder* and *Lightning*, to wit, *That Thunder makes a great noiſe by the breaking of lines*: My meaning is, That the Air patterns out this ſound or noiſe of the lines; and by reaſon there are ſo many patterns made in the air by its ſenſitive motions, the Ear cannot take ſo exact a copy thereof, but ſomewhat confuſedly; and this is the reaſon why Thunder is repreſented, or rather pattern'd out with ſome terrour; for Thunder is a confuſed noiſe, becauſe the patterns are made confuſedly.

But concerning Sound and Light, I am forced to acquaint you, *Madam*, that my meaning thereof is not ſo well expreſſed in my Book of Philoſophy, by reaſon I was not of the ſame opinion at that time when I did write that Book which I am now of; for upon better conſideration, and a more diligent ſearch into the cauſes of natural effects, I have found it more probable, that all ſenſitive perception is made by the way of Patterning, and ſo conſequently the perception of Sound and of Light; wherefore, I beſeech you, when you find in my mentioned Book any thing thereof otherwiſe expreſſed, do not judg of it as if I did contradict my ſelf, but that I have alter'd my opinion ſince upon more probable reaſons.

Thus, *Madam*, you have a true declaration of my ſence and meaning concerning thoſe places, which in my *Philoſophical Opinions* you did note, as being obſcure; but I am reſolved to beſtow ſo much time and labour as to have all other places in that Book rectified and cleared, which ſeem not perſpicuous, leſt its obſcurity may be the cauſe of its being neglected: And I pray God of his mercy to aſsiſt me with his Grace, and grant that my Works may find a favourable acceptance. In the mean time, I confeſs my *ſelf* infinitely bound to your Ladyſhip, that you would be pleaſed to regard ſo much the Honour of your Friend, and be the chief occaſion of it; for which I pray Heaven may bleſs, proſper, and preſerve you, and ſend me ſome means and ways to expreſs my ſelf,

MADAM,

Your thankfull Friend,

and humble Servant.

Eternal

ETernal God, Infinite Deity,
Thy Servant, NATURE, *humbly prays to Thee,*
That thou wilt pleaſe to favour Her, and give
Her parts, which are Her Creatures, leave to live,
That in their ſhapes and forms, what e're they be,
And all their actions they may worſhip thee:
For 'tis not onely Man that doth implore,
But all Her parts, Great God, do thee adore;
A finite Worſhip cannot be to thee,
Thou art above all finites in degree:
Then let thy Servant Nature mediate
Between thy Juſtice, Mercy, and our ſtate,
That thou may'ſt bleſs all Parts, and ever be
Our Gracious God to all Eternity.

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Digitized with financial assistance from the
Government of Maharashtra
on 18 July, 2018